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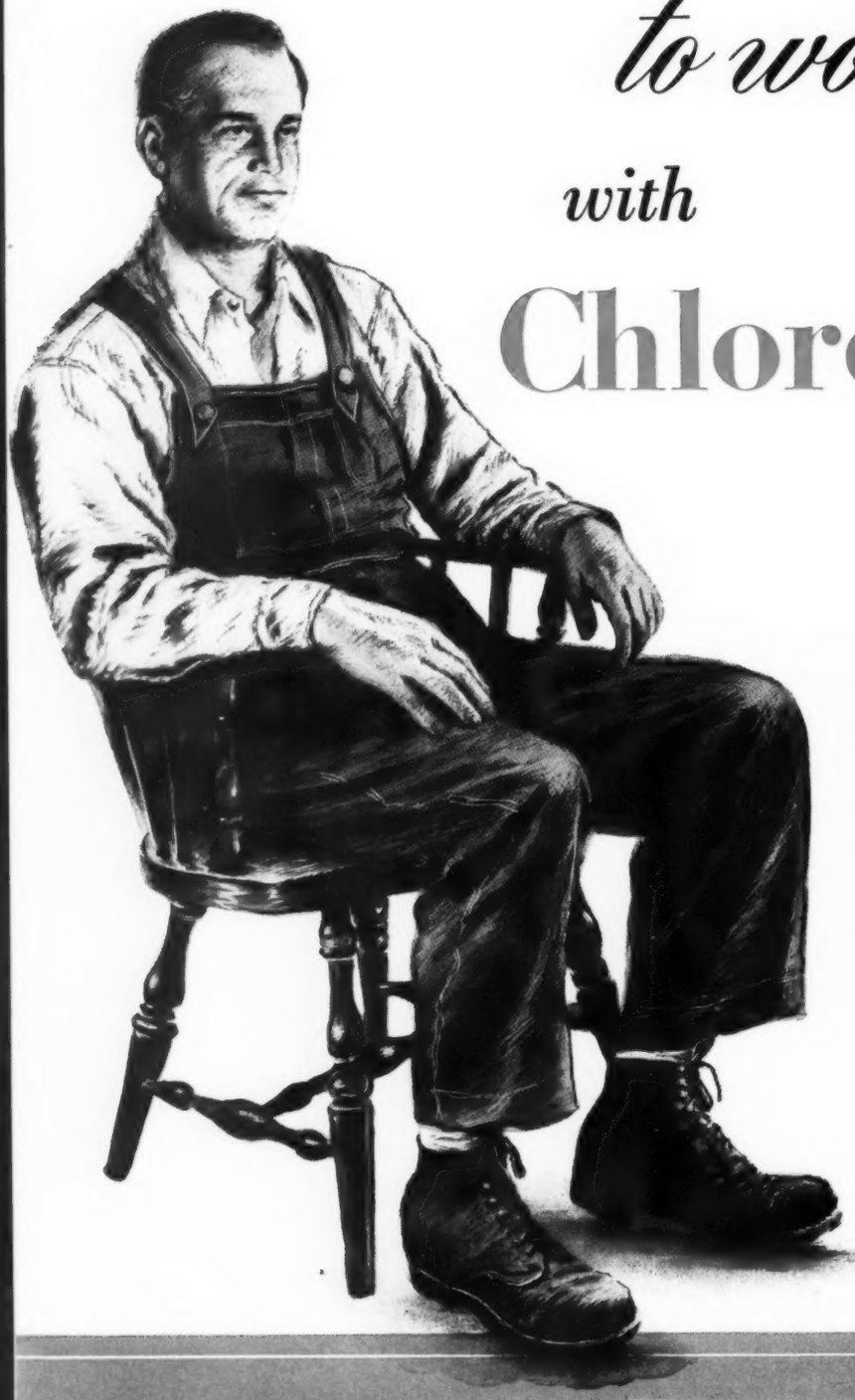

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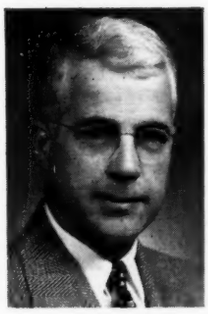

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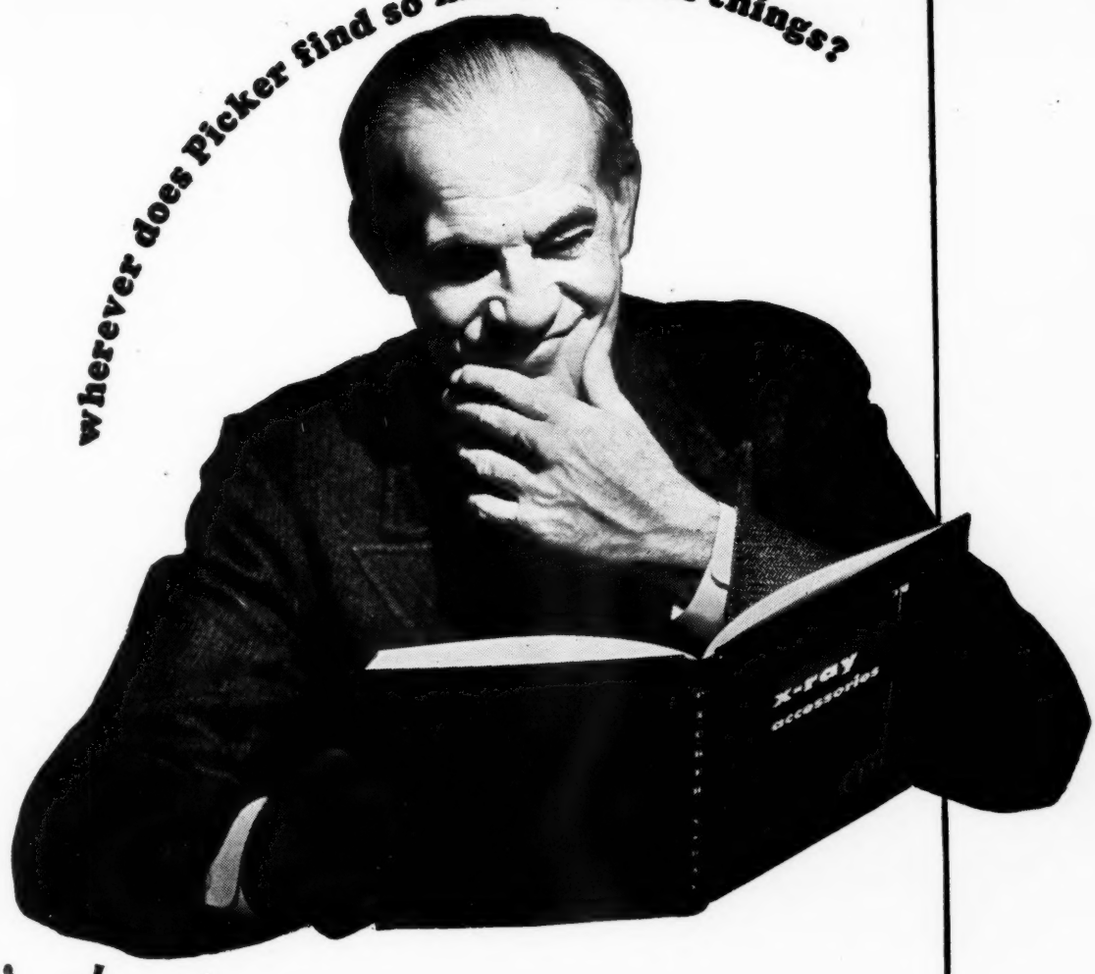

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(Concluded on Page 266)

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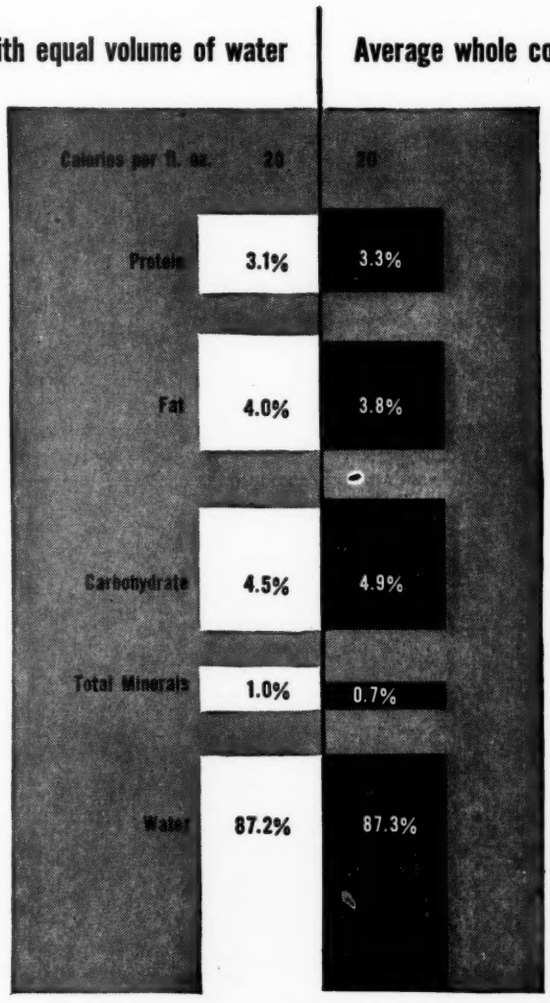

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(Continued from Page 264)

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THE COUNCIL

Many of our members have seriously criticised the official family of the Michigan State Medical Society, claiming that men get on the Council and stay there a very long time, that there should be changes.

Records show that there is only one member on the Council now who was there during 1935 to 1939. In other words, there has been a complete change, except one name since 1939. The past fourteen years there have been sixty-five changes in this official family, which would seem to indicate that the membership in selecting its Councilors and Executive Officers have provided for a change of viewpoint, and at least that the Administrative Department of the State Medical Society is in touch with the membership.

ATOMIC ENERGY WARFARE

An atomic energy talk was made January 31 at a joint dinner and meeting in Indianapolis, Indiana, to an American Legion Post, the Indianapolis Medical and Dental Societies, and the Southwestern Pharmaceutical Society, by Major General George E. Armstrong, Deputy Surgeon General of the Army, and Colonel James P. Cooney, MC, Chief, Radiological Branch, Division of Military Application, Atomic Energy Commission. The talks were on the medical effects of atomic explosion and various measures which could be taken to minimize casualties, both in preparation against an atomic attack and following such a bombardment. (From Department of the Army, Technical Information Office, release dated January 31).

2,000 EXPECTED FOR BIG INDUSTRIAL HEALTH CONFERENCE IN CHICAGO

"Teamwork In Industrial Health" is the theme of the 35th annual meeting of the American Association of Industrial Physicians and Surgeons and four other industrial associations which will be held in the Sherman Hotel in Chicago, April 22-29. The registration during the meeting is expected to exceed 2,000.

Founded in 1915, the object of the American Association of Industrial Physicians and Surgeons is "to foster the study and discussion of the problems peculiar to industrial medicine and surgery; to develop methods adapted to the conservation of health among workers in the industries; to promote a more general understanding of the purposes of medical care for employes, and to unite into one organization members of the medical profession specializing in industrial medicine and surgery for their mutual advancement in the practice of their profession."

The Association's convention is held concurrently with four other groups—The American Industrial Hygiene Association, The American Conference of Governmental Industrial Hygienists, The American Association of Industrial Nurses, and the American Association of Industrial Dentists.

Dr. Edward C. Holmblad, Chicago, managing director of the American Association of Industrial Physicians and Surgeons, in announcing plans for the 1950 meeting, said that "the bringing together of these groups is mutually beneficial and these annual meetings serve as postgraduate courses covering the entire field of industrial health and hygiene, occupational ailments and traumatic surgery."

More than one hundred papers will be read during the eight-day meeting. Some of the problems to be discussed will be the toxic effects of materials used in industry, accident hazards, industrial medical aspects of the radioactive isotopes, treatment of injuries, x-ray interpretation of industrial cases, the use of antibiotic or "miracle" drugs, the effects of the newer treatments for arthritis, the value of an industrial eye program, back injuries, trends in vacation policies of industrial workers, periodic health examination of executives and the importance of human relations with the industrial worker.

Various section meetings will be held during the week. These will deal with general manufacturing, steel and heavy industry, petroleum, rubber and chemicals, hand and restorative surgery, workmen's compensation and insurance, and the mining industry.

On Monday afternoon and Tuesday morning, April 24 and 25, there will be hospital clinics at St. Luke's and Cook County in Chicago. These clinics will present the newer types of diagnosis and treatment of industrial injuries and the handling of medical cases.

The session on Tuesday evening will be devoted to a symposium on alcoholism in industry.

All of the five sponsoring groups will gather at a joint meeting Thursday afternoon. The program will be built around the convention theme: "Teamwork In Industrial Health" which is aimed at rendering a comprehensive, complete medical service to all industrial workers.

Interest in the field of industrial dentistry has increased so much during the past year that the American Association of Industrial Dentists is sponsoring three full days of discussions and field trips instead of two as was done in former years.

During the Conference, more than twenty large industrial plants in the Chicago area will have open house in their medical departments for industrial physicians and surgeons and industrial nurses.

(Continued on Page 272)

Physicians' choice

in a wide variety of allergic disorders

TRIMETON

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Michigan Medical Service

MSMS AND MMS FEE SCHEDULE SURVEY

At the last meeting of the House of Delegates of the Michigan State Medical Society, it was voted that Michigan Medical Service issue a new certificate with family income limits of $5,000.00.

A survey is now being undertaken by the Michigan State Medical Society and Michigan Medical Service for the purpose of establishing a Schedule of Benefits for surgical services to Blue Shield subscribers whose annual family income is up to $5,000.00.

All members of the Michigan State Medical Society have been mailed an abbreviated schedule listing the commonly used procedures, with a blank for each doctor's recommended fee. Also on the schedule are listed the fees now paid by Michigan Medical Service for services to subscribers within the $2,500 income limit.

In a letter to all Michigan State Medical Society members, W. E. Barstow, M.D., President, points out that "This schedule should reflect your present charges for services to patients whose annual family income is up to $5,000. Approximately 85 per cent of the people in Michigan are within this income limit.

"You are requested to review personally a few of the more commonly used procedures," Dr. Barstow says. "Please indicate your usual fee to the 85 per cent of the population for those procedures which YOU perform in your routine practice.

County Medical Societies and hospital staffs have been requested to review the entire fee schedule and make recommendations. Specialty groups will receive a list of the procedures they perform for their suggestions.

M.D. PARTICIPATION IN MICHIGAN MEDICAL SERVICE

Michigan Medical Service is "the best answer the medical profession of Michigan has supplied to date" to the demands of the people who are asking for socialized medicine, according to J. S. DeTar, M.D., in a letter to all members of the 14th Councilor District.

"Michigan Medical Service is not the complete and final answer to the question of the cost of medical care," Dr. DeTar says, but goes on to point out that "it is the best answer thus far submitted within the scope of free, unsocialized medical practice."

The purpose of his letter to Michigan State Medical Society members of his district, he explains, is to present the reasons why doctors should become participating physicians in the Blue Shield Plan.

"Participation," he says, "simply means that you will agree to accept the Michigan Medical Service fee, as full fee for all subscribers with family incomes under $2500. This constitutes only 20 per cent of the employed population in Michigan."

"A participating physician may charge his usual fee to all over the $2500 limit, billing the patient for the portion of the fee which Michigan Medical Service has not paid."

There are now 4,714 Blue Shield participating physicians. This is roughly 85 per cent of the total doctors of medicine in the state.

"It would be of great value to a good cause if every member of the Michigan State Medical Society would agree to participate in Michigan Medical Service," Dr. DeTar declares. "This applies even if a physician sees no patients. The value lies in having the profession unanimously behind our own answer to the proponents of socialization of the profession."

The Council of the Michigan State Medical Society, at its Annual Session of January 20-21, 1950, adopted a motion that The Council of the Michigan State Medical Society request Michigan Medical Service to send to each Councilor a list of all non-participating physicians in his District, together with participation forms, and requested that each Councilor make an early effort to secure participation certificate signatures of all non-participants. Michigan Medical Service sent such lists and participation agreements as instructed to all Councilors on January 27, 1950.

MMS INCREASES SURGICAL CERTIFICATE SUBSCRIPTION RATE

Michigan Medical Service has announced that it is necessary to increase the monthly subscription rates on its *surgical certificate* only as follows:

10c for the individual.
20c for the subscriber and spouse.
35c for the family.

"We know you will all be interested in knowing why the above action, which was authorized by our Board of Directors January 18, 1950, was necessary. For a considerable time past, it was evident from our financial statements that the amount of our subscription fees was not sufficient to cover the cost of services, administration expense and re-

(Continued on Page 272)

for a protein-rich diet, I.V.

When the patient can't eat protein foods, you can rebuild and maintain nitrogen balance intravenously with AMINOSOL. The source of AMINOSOL, animal blood fibrin, is one of the highest biologic value proteins. As a hydrolysate, AMINOSOL contains all the essential amino acids in the correct pattern for optimum tissue repletion.

Clinical usage has shown AMINOSOL may safely serve as the *only* intake of amino acids (2000 cc. daily for a 70-Kg. man) or as a dietary supplement in critical or prolonged illnesses (1000 cc. daily).

Stable for two years or more, AMINOSOL is sterilized by filtration and autoclaving. Rigid tests prove each manufactured lot pyrogen- and antigen-free. It is available in 250-cc., 500-cc. and 1000-cc. containers. A sure way to preserve the safety of AMINOSOL in venoclysis is to employ sterile, disposable VENOPAK* equipment—which has a strip of gum rubber tubing next to the needle adapter for easy injection of vitamin B complex or vitamin C during the infusion. For detailed literature on the AMINOSOL line of Abbott's parenteral solutions, take a moment now to drop a card to ABBOTT LABORATORIES, North Chicago, Illinois.

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MMS INCREASES SURGICAL CERTIFICATE SUBSCRIPTION RATE

(Continued from Page 270)

serves. Thorough studies have been under way for a long period of time to determine what should be done to correct the situation. You may or may not be aware of the fact that Michigan Medical Service has not increased its rates since 1942, or approximately eight years. During that time, there have been many liberalizations, adjustments in fees, etc., all for the benefit of the subscriber. These additional benefits were provided when it was felt that such action could be taken without jeopardizing the financial position of the company. It is impossible to point out one factor alone as the cause for the loss from operations; rather, it is a combination of various factors, with increased *utilization* by subscribers as the most prevalent."

As a result of this increase in rates for the Surgical Plan of the Blue Shield Michigan Medical Service, greater interest is being shown in the organization's more comprehensive program of medical-surgical protection. This interest follows logically, inasmuch as there is no increase in rates for the medical protection, and the Blue Cross-Blue Shield hospital-medical-surgical plan can be obtained at rates just slightly higher than the rates for the less comprehensive hospital-surgical plan.

It is consequently expected that there will be a higher enrollment in the medical-surgical plan. Under the medical-surgical plan, doctors are reimbursed by Blue Shield for services rendered in non-surgical hospital cases, such as pneumonia, heart conditions, rheumatic fever, infantile paralysis, contagious diseases, etc.

Effective March 1, 1950, reimbursements for services under the medical-surgical contract are as follows: $10.00 for the first day, $4.00 for the next three days and $3.00 for the next 116 days. The subscriber is thus entitled to 120 days of service per certificate year for each enrolled member of the family. Tuberculosis, nervous and mental conditions are limited to thirty days per certificate year.

During 1949, the value of services to Blue Shield subscribers came to more than $9,800,000. Payments for veterans receiving services under the Veterans Administration program of "home town care" came to $1,172,794.28.

More than 1,500,000 persons in Michigan are now enrolled in Michigan Medical Service.

EFFICIENCY?

The Executive Branches of the Government purchase six billion dollars worth of supplies each year. A hundred and fifty thousand employes are used for this service with the salary of four hundred forty million dollars. There are nine hundred forty traffic employes for this service and nine hundred twenty-five auditors on the work of these traffic employes. The current inventories of Government supplies, not including military, is twenty-seven billions of dollars. There are over one million motor vehicles. One-half of the purchases made by the Government are in sums of ten dollars or less, and the cost of processing each service is over ten dollars. *Now is that efficiency?*

The Government is using for storage space (files) in Government buildings eighteen million square feet of public building space, which amounts to six times the space in the Pentagon Building.—*Hoover Commission Report.*

INDUSTRIAL HEALTH CONFERENCE

(Continued from Page 268)

Dr. Alfred H. Whittaker, of Detroit, president of the American Association of Industrial Physicians and Surgeons, said the association has a membership of nearly 2,300 physicians and surgeons, representing manufacturing, commercial, transportation and public-utility industries of the country.

Dr. Edward H. Carleton of the Inland Steel Company of East Chicago, Ind., will take over the presidency of the association at the Chicago meeting.

POSTGRADUATE COURSE ON GENERAL SURGERY

"Practical Problems in General Surgery" is the subject of a continuation course to be presented on April 6, 7, and 8 by the Frank E. Bunts Institute and the Cleveland Clinic. On Friday evening, April 7, Dr. Daniel C. Elkin of Emory University, Dr. Claude Beck of Western Reserve University Medical School, and Dr. R. B. Turnbull of the Cleveland Clinic will take part in a symposium on "Vascular Surgery". On Saturday morning, April 8, Dr. George G. Finney of Johns Hopkins University and others will present Panel Discussions on surgery of the colon, pancreas, biliary tract, and stomach and duodenum.

Inquiries regarding the complete program and registration can be addressed to the Director of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC.

The general oral and pathology examinations (Part II) for all candidates will be conducted at The Shelburne, Atlantic City, New Jersey, by the entire Board from Sunday, May 21 through Saturday, May 28, 1950. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates.

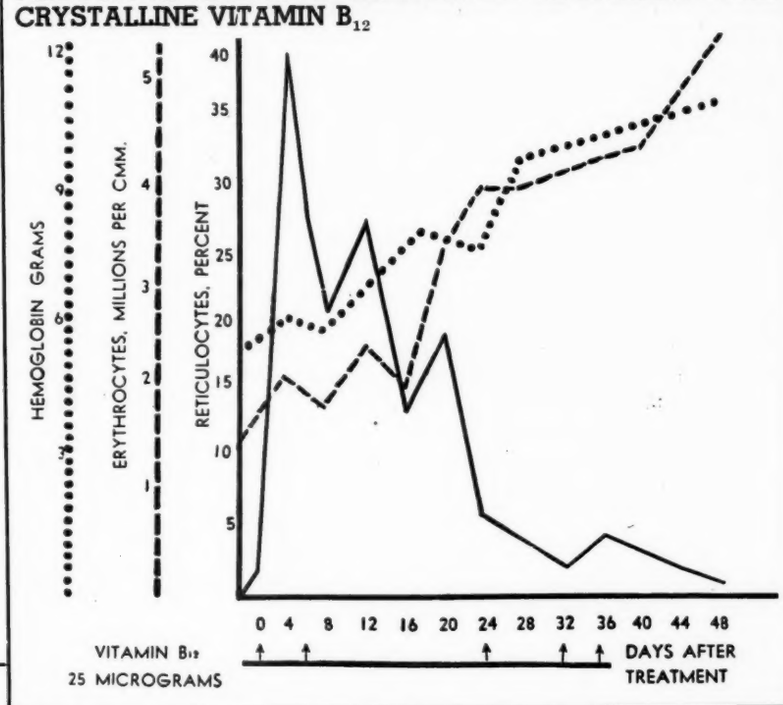
Candidates for re-examination in Part II must make written application to the Secretary's office not later than April 1, 1950.

Applications are now being received for the 1951 examinations. Application forms and Bulletins are sent upon request made to Paul Titus, M.D., Secretary, American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pennsylvania.

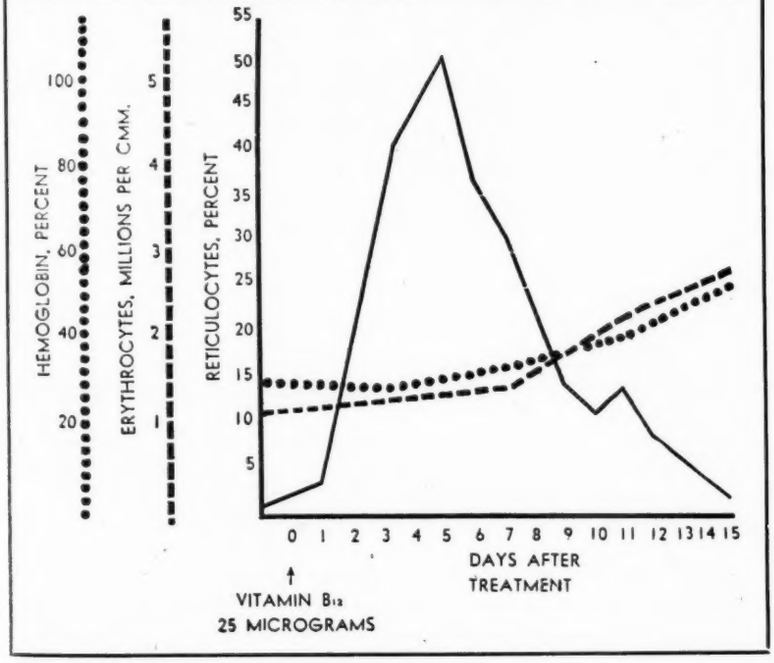
RESPONSE TO CRYSTALLINE VITAMIN B_{12} THERAPY

These charts are reprinted from the article "Crystalline Vitamin B_{12} in the Treatment of Megoblastic Anemias," by E. Schmatolla, M.D., A. Gibson, M.D., and J. M. Carlisle, M.D., which appeared in Postgraduate Medicine, Oct., 1949.

TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH PERNICIOUS ANEMIA IN RELAPSE TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}


HEMOGLOBIN GRAMS
ERYTHROCYTES, MILLIONS PER CMM.
RETICULOCYTES, PERCENT
0 4 8 12 16 20 24 28 32 36 40 44 48
DAYS AFTER TREATMENT
VITAMIN B12
25 MICROGRAMS

TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH NUTRITIONAL MACROCYTIC ANEMIA TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}


HEMOGLOBIN, PERCENT
ERYTHROCYTES, MILLIONS PER CMM.
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Political Medicine

"SOCIALIZED MEDICINE AS I SAW IT."

(Excerpts from a recent address by Dr. Ralph J. Gambell, Insurance Economics, January, 1950. *Colliers* for February 11, 1950 has an article from this Doctor.)

Over here you have been led to believe that the vast majority of British doctors are in favor of this scheme. The figure has been quoted to you that considerably over 90 per cent of them have already joined. The presumption, of course, is that they joined willingly. Nothing can be further from the truth. Let me use my own case as an example. Before the introduction of governmental medicine in July, 1948, England had a system which is little known here in the U. S. When a doctor wished to settle in some area, it was not the usual custom for him to just hang up a shingle. In the normal course of events, he would succeed to the practice of a doctor who had died, or more often, a doctor who had retired, and for the succession he would pay a purchase price usually calculated at 1½ times the annual gross taking of the practice though in particularly favorable areas this could go up to 1¾ or even twice the annual gross. Now these are not small sums of money.

In the practice to which I went—not an especially large one—the annual gross was approximately $8,000. Therefore, it cost me $12,000. Now as you can imagine, after serving five years with the RAF I had no $12,000, I borrowed the purchase price from the bank. The coming of the National Health Service Act—a vast system of government medicine—made this long established practice of buying and selling illegal. But it should be said in fairness that the doctors were not to be robbed of their practice value. A sum of some 264 million dollars was appropriated as compensation. Provided, and this is the vital proviso, provided that the doctor claiming compensation had entered the nationalized medical scheme on or before July 5, 1948, he would be reimbursed. It will be clear to you that in my personal case I stood to lose no less than $12,000—not even my own at that—should the scheme come into operation on the appointed day and my head not be there to be counted. And that story applies to almost every doctor in Great Britain. As the government claims, the doctors in Britain are 99 44/100 per cent pure.

As a general practitioner, I had registered with me, because of course in socialized medicine, we must have registrations; I had registered with me some 3,200 souls and this, believe it or not, was not the maximum. I could have had 4,000 and even more in certain exceptional circumstances. I challenge any of you listening to me to have even a conception of what is entailed in being responsible for the health of that number of people. In America there is one doctor for substantially less than a thousand persons. I used to do three one-hour office periods each day. And I could expect twenty people and more in one of these periods; that is an average of three minutes per patient. And I have made as many as thirty-six house calls in one working day in addition to my work in the office. You will, I am sure, appreciate what sort of medicine this is.

ACTIVITY UNDER EXISTING LEGISLATION

Public Law 658 of the 79th Congress, authorizing health programs for federal employes, attracted attention in the past several weeks. At hearings before the House Appropriations Committee the Federal Security Agency testimony indicated that in the City of Washington alone the Public Health Service operates a total of sixteen health services for employes of various government agencies. It will be recalled that under Public Law 658 (Ramspeck Act), a government department could request appropriations to establish a clinic to assist in the maintenance of good health for its employes. In setting up clinic services medical personnel from the Public Health Service could be utilized or private physicians and/or nurses might be employed directly, or the operation might be completely "farmed out" to the Public Health Service.

In testimony at the recent House Appropriations hearings, the program objectives were stated. "The maximum permissible cost of a health service would be $8 per year for employes to be served unless special industrial conditions or other abnormal health or accident risks exists . . ." The program includes treatment of on-the-job illnesses and dental conditions requiring emergency attention, pre-employment examinations, advisory diagnostic services, referral of employes to private physicians and dentists, treatment and medication with the consent of the patients' private physicians.

Following the hearings, President Truman ordered government agencies to "proceed as soon as possible" with the extension of on-the-job health services to a very large proportion of federal employes, including 200,000 in Washington, D. C., and federal employes in other cities with heavy concentration of workers and in such federal industrial establishments where the work is hazardous. His statement no doubt is meant to stimulate the already existing program and bring about uniformity among agencies. It could be used also as justification for appropriation requests.

PRESIDENT AGAIN ASKS HEALTH INSURANCE

In his budget message to Congress, President Truman again recommended enactment of compulsory health insurance and proposed a 0.25 per cent payroll tax on workers and employers, beginning January 1951, receipts to go into a government trust fund for financing of preliminary expenses in launching the vast program. The Bureau of the Budget estimated that this "overture tax" would raise $250,000,000.—*A.P. News* release.

(Continued on Page 276)

DOCTOR, WILL YOU MAKE THIS NOSE TEST?

SEE AT ONCE PHILIP MORRIS ARE LESS IRRITATING

It is one thing to read published studies.* Quite another to have your own personal experience provide the proof! The PHILIP MORRIS nose test takes but a moment. Won't you try it?

HERE IS ALL YOU DO:

1...light up a PHILIP MORRIS

Take a puff—DON'T INHALE. Just s-l-o-w-l-y let the smoke come through your nose. AND NOW...

2...light up your present brand

Do exactly the same thing—DON'T INHALE. Notice that bite, that sting? Quite a difference from PHILIP MORRIS!

With proof so conclusive, would it not be good practice to suggest PHILIP MORRIS to your patients who smoke?

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Philip Morris & Co., Ltd., Inc.
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* *Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241-245; *N.Y. State Journ. Med., Vol.* 35, 6-1-25, *No.* 11, 590-592; *Laryngoscope, Feb.* 1935, *Vol. XLV, No.* 2, 149-154; *Laryngoscope, Jan.* 1937, *Vol. XLVII, No.* 1, 58-60

(Continued from Page 274)

S.2940 NATIONAL HEALTH ACT

Mr. Hunt, of Wyoming, January 30 introduced a bill to consolidate the health activities of the Government, to provide a program of national health insurance in order to make available to low-income groups medical services of the highest possible quality and in the greatest possible volume, and for other purposes. This was referred to the Committee on Labor and Public Welfare.

Comment: TITLE I—New department created. This would establish an executive department known as the Department of Health. The Secretary (member of the President's Cabinet) and the Under Secretary would be professional health workers with experience as practicing physicians or dentists. Four assistant secretaries experienced in the field of medicine, dentistry, sanitary engineering, or public health, would be appointed, and the fifth, the Assistant Secretary for Staff Services, would be experienced in administrative management. (None may have held office in a political party.) A special advisory board would assist the Secretary of Health and be composed of the Chief of the Office of Medical Services in the Department of Defense, the Federal Security Administrator, and the Administrator of Veterans' Affairs.* The *organization of the department would include* a Bureau of Medical and Hospital Care, a Bureau of Public Health Practice, a Bureau of Children's Health, a Bureau of Research, and a Bureau of Staff Services. The *duties of the new department would include* all the health activities of the present Federal Security Agency; promotion of more adequate local public health and medical- and hospital-care services in shortage areas, including the training of health and related personnel; administering a national medical-care program; increasing the use of nongovernment, private, and university physicians and dentists in providing care for Federal beneficiaries; improved planning and operation of Federal hospitals and the medical- and dental-care services therein to insure better integration with civilian hospitals and civilian medical and dental services; co-ordinating the Government's health care, public health, and health research activities; encouraging co-operation by units of the Department of Health with voluntary health agencies; promoting better civilian and medical care preparedness for defense; improving the co-ordination between military and nonmilitary medical and dental programs of the Government and co-operating in providing freer exchange of personnel between military and nonmilitary services; development of more centralized planning of nonmilitary medical and health programs of the Government; and furnishing the President and his Cabinet with information and assistance on vital problems in mental health and mental attitudes with reference to world co-operation for health and peace.

There would be transferred to the new Department of Health the following: the Public Health Service and the Food and Drug Administration of the Federal Security Agency; functions of the Children's Bureau concerned with Social Security Administration; the functions of the Social Security Administration pertaining to research in the field of health; the health functions of the Office of Vocational Rehabilitation; and the civilian hospitals in the Canal Zone under the jurisdiction of the Panama Canal; the dispensaries, clinics, health centers, laboratories and other facilities of the Department of Health of the Canal Zone; and all functions of the Panama Canal and such department of health in relation to the foregoing.

Regarding the *military and Veterans' Administration hospital programs,* the bill provides that the President shall appoint a non-partisan commission to make a study with a view toward recommending either the integration of such hospital programs with a hospital program of the Department of Health or the continued separate administration of such hospital program. The commission would report to Congress within 18 months.

The bill also calls for a continued study of all nonmilitary medical activities and recommends their transfer to the Department of Health if that course of action is desirable.

TITLE II—Part A—Shortage Areas—Would authorize $35,000,000 annually in federal funds to be administered by the National Health Insurance Board to provide grants and loans to medical personnel who practice or who desire an education in medical fields and will practice in rural or shortage areas; would make grants-in-aid in maintenance and operation of health centers; would make loans for construction of health centers, clinics and hospitals. Construction loans and grants to public or private nonprofit organizations are repayable to the United States in ten years without interest. Loans for construction and durable equipment made to private individuals are to be repayable in ten years with 2 per cent interest.

Part B—Would assist farmers expand health co-operatives and authorizes $10,000,000 for the first year and $15,000,000 annually for four additional years to be administered by the Secretary of Health after consultation with the Secretary of Agriculture for the purpose of assisting farmers' co-operatives in selecting rural areas to initiate and carry out plans for providing medical and dental care for their members.

TITLE III—Creates a voluntary national health insurance program to be administered by a *National Health Insurance Board* with the Surgeon General of the Public Health Service (representing the medical profession)† as chairman, and four members appointed by the President, one representing hospital associations, one representing dental associations, and two representing the public at large. Their salaries would be $15,000 per annum.

Insurance would be available to every person and his dependents who makes application in writing for coverage if the aggregate gross income of such individual and his dependents does not exceed $5,000 per annum. The *amount of premiums would be determined by the National Health Insurance Board.* Benefits would be paid (after the first $5) by the Board for medical, dental, hospital, nursing, laboratory, ambulance, and other services as the Board designates. Hospital expenses would be paid

*We object to the Federal Security Administrator's being on this advisory board. The cabinet member should be an M.D.—EDITOR.

†This appointee does not represent the Medical Profession. He is a Government officer committed to Socialized Medicine. The Medical Profession would be unrepresented.—EDITOR.

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Programs for Early Detection of Cancer

By Arthur A. Humphrey, M.D.

Battle Creek, Michigan

IN 1948, THE Cancer Control Committee collected data from the fifteen cancer detection centers then in operation in Michigan by the use of questionnaires and personal visits to each center. In addition to comparable statistical data obtained by the questionnaires, the visits were productive of accurate information which resulted in a clearer picture of the welcome the project had received in the community as well as its gain or loss in prestige since its inception. Since this time, the Cancer Control Committee has attempted a comparison of the average center with other means of cancer detection in current use in this state and elsewhere.

Many of the centers in 1948 were of such recent origin that they were still groping with their problems and altering their programs from week to week. It was quickly observed that there was no established plan of operation. A Cancer Detection Center Report recently made by the American Cancer Society, embracing ninety-six centers in the United States, also points out this lack of uniformity of operation. This is readily understood when the oldest center is twelve years old and 47 per cent has been in existence but two years. The endeavor of the American College of Surgeons, in conjunction with the American Cancer Society, to set up minimum standards of operation came late in 1947; however, since most of the centers had already been established in practice or at least in theory, they failed to conform fully to these suggested standards. Therefore, before further comment is made, it must be stated that most of the detection centers in Michigan are experimental in the sense that there are striking differences in their basic principles of operation, making for diametrically opposed plans of procedure and examination, with each group having its fervent proponents.

Certain facts appeared, however, which were obvious; thus, sponsorship appeared best when the center was operated jointly by the county medical society and the local branch of the cancer society; a hospital appeared to be the most economical location in the average community and the most practical outside of large cities; in small communities it was felt that something similar to the Hillsdale Plan was the answer; and it was the consensus that known, or highly suspicious, cancer patients should not be accepted at the detection centers but should be referred immediately to their own physician, emphasis being placed on the examination of the well or comparatively well individual whose symptoms, if present, did not otherwise cause him to seek medical attention.

In the Michigan survey a percentage of 1.2 cancer patients was found in 8,693 examinations in the centers; the American Cancer Society survey reported 0.8 per cent out of 51,728 examinations. Recent experiences indicate that in the future a lower percentage of positive cases will be found due to the depletion of the more symptomatic cases in the backlogs. Jones and Cameron (J.A.M.A., 135:964-967, 1947) pointed out two years ago that these percentages were much higher in the centers than the calculated expected frequency, due, said they, to the fact that the centers were acting as clinics and accepting patients who were not free from symptoms.

The cost of equipping and operating cancer detection centers varies from place to place. Those occupying hospital quarters with little or no over-

head for rent, light, equipment, heat, et cetera, demand less financial outlay than when the center is housed in rented quarters where all overhead and equipment must be paid for. In the Michigan survey, the cost per cancer case found varied from approximately $93 to $1,850, the average being $523. At a recent national conference on cancer detection centers, costs up to $6,000 per cancer case discovered were reported. Such costs make impractical the development of a state or nationwide detection program based on the procedures of the present day detection center.

The foregoing is a brief but necessary introduction to the accented purpose of this paper, that being to determine the scope of the examination which appears to be most practical and what ancillary procedures should be used, not only by the detection center staff but also by the practitioner in his office. In prefacing this, I might draw from a statement of Dr. Larkin of Connecticut, made in 1947, when he presented an analysis of detection centers up to that time, in which he stated that the annual examinations proposed for the early diagnosis of cancer by some enthusiasts would require the entire time of every physician in the United States and at an annual cost of one and one-quarter billion dollars. The accuracy of this statement has not been investigated but it is doubtful if it can be challenged on the basis that it is an overestimate. These statements reveal a very definite limitation to the development of any comprehensive detection program.

Lay proponents of the detection center have pointed with emphasis to the various remediable conditions uncovered by the general physical examination which were incidental and noncancerous findings. When I have failed to share this enthusiasm and have pointed out that this was not the function of the detection center or the cancer organization in general, for the society would dissipate its efforts if it embraced all diseases, I was usually greeted with chilly doubt. If I advised that medical men were naturally opposed to "free" general clinics for non-indigents suffering from various disorders, the proponents retired in shocked silence. Parenthetically, the detection program has unwittingly become a prominent and favorable factor in public relations when the need is great.

In the related field of laboratory procedures, a urinalysis is done in most of the Michigan centers but routinely in only two-thirds of the ninety-six reported in the national survey. Blood counts were performed in many of the centers but on only a few are they complete. Tests for syphilis are done in a lesser number. Chest x-rays are rarely done in Michigan centers but were reported in 44 per cent of those in the national survey as a routine measure.

It is agreed that, except for experimental purposes, extensive x-ray studies are beyond the scope of the detection center. Biopsies are occasionally performed, but the consensus is that they are the function of the cancer diagnostic clinic and have no place in the detection center. Vaginal smears for cytological study were taken in 50 per cent of the centers in the United States but infrequently in the fifteen centers in Michigan. Their limitations are the subject of so much controversy that they can be considered only a screening procedure in selected cases.

In one Michigan detection center in 1948, the general physical examination was discontinued for several reasons and a modified one adopted. It was observed that the amount of time consumed by the general physical examination resulted in less attention being given to the common cancer sites. By limiting the examination to essentials far more examinees could be taken in a session to lessen the much-criticized backlog. Further, it was obvious that too many individuals with noncancerous diseases, and in many instances undoubtedly aware that their symptoms were not of a cancerous nature, were taking advantage of the general examination. In many instances, these persons previously may have had an annual examination by their own physician or would have gone spontaneously to their own physician when symptoms developed.

The fact that the history and physical examination were exceptionally complete when submitted to the physician of the patient's choice left this doctor very little opportunity to do anything for the patient except to verify some of the findings and suggest treatment. I am aware that this procedure of forwarding the examination data to the physician of the examinee's choice is not universal but makes the evil no less apparent.

At present, the examination in this center is limited to a history and the following salient cancer areas: oral cavity, skin, breasts, abdomen, thyroid, lymph nodes, rectum and female pelvis, so that it becomes definitely an examination for cancer alone. Such time-consuming procedures as examination of the heart, lungs, ears, eyes, reflexes and blood pressure readings have been omitted.

Through the co-operation of the county tuber-

culosis society, miniature x-ray films are now routinely taken, and it is obvious that, by this method, far more early pulmonary cancers will be detected than by physical examination of the chest. If anything is observed on the small chest films, the examinee is referred to a roentgenologist for a more complete study and who, in the absence of a tuberculosis society x-ray unit, can make miniature chest films on all patients.

The possibility of a thorough physical examination disclosing one of the ultra-rare tumors of the heart or a cancer influencing blood pressure readings is so remote as to scarcely deserve comment.

The laboratory examination, in addition to the miniature chest films, consists of a hemoglobin determination, test for syphilis, and urinalysis. The urine examination consists only of sugar, albumen, and microscopic or chemical tests for blood. If the hemoglobin is low, the patient should be referred to a hospital or other laboratory for a complete blood study. It would appear that the omission of blood studies, other than the hemoglobin determination for anemia, would result in failure to recognize cases of leukemia. This, however, was not the case in the national survey, where only one case of leukemia was encountered, although 57 per cent of the centers performed blood counts. It might also be pointed out that the end result in the treatment of leukemia, early or late, is the same, and the efforts of the center should be directed toward those types of malignancy where early detection promises some chance of a cure or at least palliation.

In some centers, the examination of the stool for occult blood is considered a valuable laboratory aid and is probably warranted when one considers the simplicity of the procedure. If positive, the sources of error in this test should be reviewed by referral to an internist who will weigh the advisability of further x-ray studies.

Omitting a detailed account of the findings of the various surveys, it was generally observed that practically all the cases discovered were in accessible sites and early detection could assure a high percentage of curability. On the other hand, cancers of internal organs have a very low rate of cure, with few exceptions, and failure to perform a complete physical examination would appear to make little difference. Since it is apparent that an ideal and comprehensive detection program is impossible because of the lack of trained workers, physicians, and the excessive cost, it seems practical to concentrate early detection on those sites that can be examined visually or by the palpating finger.

When one considers only the detection of lesions in accessible sites, the patient's history does not share the importance usually attached to it by the medical profession. It seems advisable to have a brief history taken by nurses rather than to burden the physician who later will check the more important points. The national survey even recommends a check list type of history form to be filled out by the examinee, a procedure which has proved of value in various medical school clinics.

Although the facts adduced by the two surveys reviewed in this paper reveal the inability of the cancer detection center as now organized to provide a competent service to more than a small percentage of the population in any community, these undertakings have made definite contributions to the control of cancer in their areas and by example to many other areas. For this, they are entitled to the fullest credit. Probably their outstanding value has been that of arousing in lay persons an appreciation of the value of the periodic medical examination in the absence of signs and symptoms of disease.

Whether cancer detection centers, as such, continue to function will depend on their ability to render a satisfactory service to a vastly increased number of people. In the last analysis, the value of the examination for cancer detection, either in the center or the physician's office, will depend not on environment, equipment or procedure but will be determined by the ability, training and experience of the physician making the examination and interpreting his findings.

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"SOCIALISM" EMERGES AS CAMPAIGN ISSUE

Senator Byrd (D., Va.) voiced the first Democratic criticism of President Truman's Jefferson-Jackson dinner speech.—Free Press Wire Service, February 18, 1950.

The Virginia senator, who has opposed the President's spending program, said the country will be "irrevocably committed to socialism" if three administration proposals are adopted by Congress.

He listed these as the "socialized medicine" of the compulsory health insurance plan; the "socialized agriculture" of the Brannan farm subsidy payment plan and the "extension of socialized housing."

"Add these to the President's public embrace of chronic deficit-spending and you have a non-stop, high-speed highway to socialism, with or without an insulted intelligence," Byrd said.

Lay Interest in Cancer

By Donald E. Johnson
Past President, Michigan Division
American Cancer Society

Flint, Michigan

BEFORE DISCUSSING the assigned subject, "Lay Interest in Cancer," it might be well to ask ourselves the question, "Is there a lay interest in cancer?"

Obviously, the answer is "yes." The attendance at today's conference of so many lay workers, who represent hundreds of others in the nonprofessional group, is evidence of a kind that can be multiplied many times in our state and nation. Every day in the year, in practically every community and throughout the rural areas of our country, thousands of lay workers have taken up the cancer fight. They have marshaled their resources and pooled their efforts—determined to carry on with the limited weapons that science has provided for the battle.

Back of these workers are the many thousands of homes where the cancer story has been told, either by cancer itself or by the little pamphlet that came from school or through the mail or the newspaper or magazine article.

And those of us in business, we have a deep interest. We know what cancer can do to a staff that has been trained and built up over a period of years.

Yes, the evidence can be piled high and facts more than justify us in accepting the statement that there *is* a lay interest in cancer.

For thousands of years, the nature and causes of cancer were a closed book to the lay and professional world. Gradually through the years, the book has been pried open through scientific investigation, with many willing hands aiding. While much knowledge has accumulated about many cancer problems, the final chapter in the cancer book has not been reached, as we all know.

Today, an ever-increasing number of laymen, so far as they are able, are applying the newer knowledge about cancer to the protection of their families and themselves. However, the number must be greatly increased before much progress can be made in reducing cancer deaths. There has been a marked increase in the layman's awareness of cancer hazards, and this is all to the good. But there has to follow a response in the form of direct action on the part of the layman to do those things which he has accepted as necessary to be done if cancer control is to become an effective, living program.

Cancer workers are thus presented with a prime objective—cancer education must be carried to *all laymen everywhere.*

The great majority of today's cancer patients are in an advanced and incurable stage when they first seek medical aid. The high mortality from the disease can be attributed, in large part, to the many false beliefs regarding cancer which cause delay in seeking medical attention. These beliefs must be eradicated by expanding and intensifying the cancer education program.

Cancer control is not a one-man job, nor a one-man show with backstage support. Neither the layman, the physician, nor the scientist in his laboratory can do the work alone. There must be a community of spirit and there must be teamwork.

Laymen must appreciate the fact there is no short cut to cancer control. We travel a long path that has already taken us around and over many obstacles, and the distance ahead is still unknown. But of this we are sure—we are going ahead on the only path that science has been able to chart, and, it being the only path, we must travel with determination.

It has been pointed out with emphasis that the community control of cancer is the sum of control in individuals. How true!

If we, as individual laymen, do not realize that we must make the first move in protecting ourselves by applying to our own physician for an examination to confirm the absence or detect the presence of cancer, then to what avail is a cancer control program? The key to control is with the individual.

If cancer is detected, the layman has an additional duty. He must co-operate in all treatment and follow-up measures found necessary. Otherwise, an early diagnosis will be without avail and the control program becomes a program without results.

Laymen must also realize that no matter how great their own interest in cancer may be, the physician has all diseases to consider in his daily work. Cancer, as a problem in itself and in the patient, has to be examined by the physician within

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

the limits of time at his disposal. So it becomes reasonable to suggest that cancer programs should be organized to claim only their fair share of the professional services available.

A physician is well aware of the tremendous scientific and social problem that cancer presents. In his time and in his way, he faces it with courage, skill and patience. He will never accept defeat. For this, our thanks and praise.

It might be presumptuous for an ordinary layman to suggest the part a physician might play in cancer control, so we advance cautiously for a minute or two.

First, physicians must accept the responsibility for educating the public. Laymen will help and supplement wherever and whenever possible, but over-all guidance and responsibility must come from the physician.

The professions have provided laymen with a wealth of cancer educational material. In printed form, some of the material has been splendid, some of it good and some of it not so good. Whatever its quality and appeal, it has been passed on to the public by all means available. For a while, the educational program on the community level was on what might be termed a scatter-shot basis, with information being tossed out here and there—with no particular pattern in mind. There was always the hope that someone would be hit by a catch-phrase or a fact that would arouse his interest in cancer.

Recent years, however, have brought a change in this plan, and we now find our educational program being specifically directed at groups as well as individuals, all according to a plan and pattern that experience has proved to be the most effective. The physician has helped to bring about this change, but we must expect more assistance, advice and guidance if we are to accomplish the desired goals.

Second, the physician must be sympathetic, understanding and patient with the layman who expresses or shows an interest in cancer. He must realize that a question about cancer from a layman does not brand the inquirer as a "cancerphobe," but rather does it indicate a sincere desire of the individual for further information on this subject.

And third, with the layman's increasing knowledge of, and interest in, cancer, the physician, too, should keep abreast of advances in diagnosis and treatment in order to render the best service to his patients. In Flint we are particularly proud of our medical society which has carried on a continuing program of cancer education for its members. The annual Cancer Day sponsored by the Genesee County Medical Society has assumed national importance in cancer teaching and brings authorities in the field from all sections of the nation. Similar educational opportunities are regularly offered to physicians in other sections of the state.

With the layman and the physician joined in a great cause, what should be the direction of their efforts? From a careful analysis of the general problem it would seem that the greatest general contribution that can be made to the control of cancer at this time is a greatly expanded lay education program—a program definitely directed at, and reaching, both high school and adult groups.

If we are to hope for anything at all in cancer control, we must have more cancer education—even at the expense of curtailing services to the cancer patient. Persons charged with responsibility for disposition of cancer funds must not be too greatly influenced by the sympathetic appeal which is found in direct service to the cancer patient as this type of service contributes little or nothing to the prevention or control of cancer or to the cure of a cancer patient.

The most significant personal contribution a layman can make to cancer control is to have a periodic medical examination by his own physician. Cancer in its early stages—where the percentage of cure has shown marked increase—can never be discovered in any other way. Better a dozen negative examinations than neglect one when cancer could have been found in an early stage.

A program that offers such an examination to the largest percentage of the population at the least cost will make the greatest contribution to the control of cancer in any community. Convincing proof of the value of such a program has been presented at this meeting. We also have had convincing proof that the layman must be part and parcel of the program.

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Primary adenocarcinoma of the vagina is rare.

* * *

Serum amylase was elevated in one-third of thirty cases of carcinoma of the head of the pancreas.

* * *

Leukemia tops the list as the most common type of fatal cancer in children.

* * *

Estrogens should not be given to any one with a family history of cancer.

Effective Cancer Control

Charles S. Cameron, M.D.,
Medical and Scientific Director
American Cancer Society
New York, New York

NOWHERE in the world do voluntary health agencies flourish in such abundance as they do in the United States. They are an expression of the charitableness of our people toward those less fortunate, and they are testimony to the democratic spirit of Americans in organizing and working cooperatively for the common good.

The American Cancer Society, a venerable member of the family of health agencies, should be thoroughly known to all doctors for its services are many. Through its national office in New York, its sixty-one chartered divisions and 2,613 county branches, it conducts a broad-based year-round effort to control cancer, one of the foremost medical problems confronting us.

The control of cancer eventually will come through an understanding of cancer's causes, means of prevention and effective treatment methods; this knowledge waits on research. The Society has recognized the importance of intensified investigative efforts in the field of growth and spends 25 per cent of its income in the support of such studies and in the training of young scientists to carry them forward. During the present year this support amounts to $3,500,000. The total research expenditure for the past five years is $13,153,560.

A substantial measure of control over cancer can be achieved today with the knowledge already at hand. The disparity between cancer's *curability* and the cures being achieved is striking. For example, cancer of the breast is curable in 80 per cent of patients who are treated when the disease is confined to the breast; yet the country-wide cure rate is less than 35 per cent. When cancer of the rectum is confined to the mucosa, cure rates of 70 per cent have been reported; yet the overall rate of cure is about 11 per cent. Similar differences hold for most forms of the disease. In order to achieve a larger measure of cures, the American Cancer Society engages in an intensive educational and publicity campaign, based on knowledge of cancer's early signs and symptoms (the Danger Signals), and the value of periodic physical examinations.

April is the month when the American Cancer Society makes its annual appeal to the public for support of its programs. As more and more of our people live longer, the incidence of cancer increases. As the problem becomes more widespread, so must the effort to control the disease be intensified. The Society is dedicated to the principle that through education an effective measure of cancer control may be achieved at this time.

Improved services to patients with cancer are provided by support of cancer clinics, organized programs of cancer detection and information services; these efforts are augmented by a corps of volunteers who provide loan closets, transportation services, recreational activities and dressings.

Of immediate interest to doctors is the professional education program. During the past year, three monographs of a series dealing with cancer by anatomic site have been distributed to practicing physicians throughout the country. The series will be continued this year, with distribution at three-month intervals.

The professional journal *Cancer,* which first appeared in May, 1948, has been well received by clinicians and investigators interested in the problems of abnormal growth. A series of motion pictures for professional audiences, treating the problems of early diagnosis of cancer by anatomic site, has been outlined. Two of the films have been released, the first concerned with the general problem of the early diagnosis of cancer and the second concerned specifically with the early diagnosis of cancer of the breast. A third, covering cancer of the gastro-intestinal tract, is in preparation and will be released this year.

A new publication of the Society will appear this year, and will be distributed bi-monthly to practicing physicians throughout the country. Topics of interest to the general practitioner will be presented in digest form, together with brief abstracts of significant papers appearing in the literature. Clarity, brevity and general interest will be stressed. It is the Society's hope that this digest will be accepted by the busy physician for whom it is planned.

The library of the Society publishes monthly a bibliography of the current cancer literature which is available on request to physicians, research workers and libraries. The library will prepare, on request, bibliographies on any topic related to the field of cancer. A package lending library has been established which will supply reprints, on a loan basis, to any physician or investigator requesting the service.

Cancer Control in Michigan

By Norman F. Miller, M.D.
Chairman, Cancer Control Committee
Ann Arbor, Michigan

NO ONE NEEDS to be told that the control of cancer is a big problem. Indeed the word "cancer" is a broad term which includes a large group of diseases. The many far reaching clinical and research aspects of these diseases are of tremendous importance but, for the most part, lie beyond the scope of our discussion here today. It is our desire to limit the scope of this meeting to consideration of ways and means for greater use of long recognized, thoroughly proved, realistic and readily available means for cancer control. By so doing we may reasonably hope to see the high mortality from the more common forms of cancer practically wiped out. This is *not* idle talk; it is *not* propaganda. It *is* the time-proven conclusion of innumerable cancer workers throughout the world and offers to all of us a practical program for cancer control. Let us look hopefully at research promises for the future but at the same time let's not overlook the sure means which now lie at our feet for reducing cancer mortality tenfold.

At one time in world history the prototype of the undertaker was the only person who could do anything for the cancer patient. Then, with the development of medical endeavor, the physician came into the picture where he has since remained the one most concerned with the cancer problem. But today we recognize cancer as something more than a medical problem. It is also a social, an economic, and an educational problem. Recognition of these wider ramifications of the cancer problem are neither new nor universal. The American Cancer Society and many medical organizations, including the Michigan State Medical Society, have for years assiduously pursued educational programs. While full credit should go to these organizations for their pioneering and telling accomplishments, they are not enough. That is why we are asking you and the organizations you represent to join the fight against cancer in Michigan. But the development of a statewide cancer detection service, by making every doctor's office a cancer detection unit, will accomplish little unless the service is utilized, and it is here that you can accomplish the greatest good and make your influence felt to best advantage.

If our combined forces can be co-ordinated to fight cancer by means available today, then I have no fear of contradiction in stating that deaths from many of the more common cancers will be reduced tenfold; that death from certain cancers will be practically eliminated, and all this with means now available for our use. To deal cancer such a telling blow, however, can only be accomplished by the combined effort of every organization completely or even remotely interested in health matters. There *must* be acceptance of a common objective; there *must* be clear understanding of the part each of us shall play, and there *can* be no wasteful dispersion of effort.

Since I assume that we *are* willing to unite, to combine our efforts the more effectively to fight this common enemy, let me restate our objective and make clear the part we each can play in this renewed attack against the killer in our midst.

Earlier on this program you were told about the cancer situation in Michigan; about our evaluation of cancer detection centers in Michigan. You were also told about the Hillsdale Plan for Tumor Detection and how it works. The layman's part in this program has also been ably presented. Let every interested person reread these reports, copies of which have been made available. Since prevention of cancer by the elimination of precancerous conditions and by detection of cancer in an early readily curable stage are today the surest means of reducing deaths from this source, it is obvious that actual achievement of the long advocated periodic examination, the cancer detection examination, must be made an accomplished fact.

Our aim then is *periodic health examination for every adult in Michigan at reasonable cost, to the end that cancer may be detected in an early curable stage, or better, prevented by the recognition and elimination of precancerous lesions.* Since the Hillsdale Type Plan of Cancer Detection, wherein every doctor's office becomes a detection unit, is today the most suitable means yet devised for obtaining this service, its statewide adoption becomes a major part of our objective. This plan need not interfere with, or disrupt existing facilities for cancer detection, but its statewide adoption, both in principle and practice, will mark the beginning of a new era in cancer control.

It may be of interest to this group to know that, at a conference called by the American Cancer

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

Society in Portsmouth, New Hampshire, in September, 1949, and attended by approximately seventy-five physicians and other cancer workers from all over the United States, the place of cancer detection centers in the cancer control program was discussed. At the conclusion of the conference the following principles among others relative to detection centers were adopted. I quote:

"Experience has disclosed the fact that Detection Center Examinations on all citizens are not practicable."

"At the same time, it is recognized that a large section of the public does visit a physician at least once annually. If such physicians will perform official physical examinations on all patients, it is reasonable to expect that most accessible cancers in such persons will be diagnosed at a much earlier stage than in the past with corresponding increased probability of cure. . . . In brief, it is suggested that every physician's office or clinic become a 'Cancer Detection Center.' "

Doctors are busy caring for sick people, and the addition of periodic health examinations to their already crowded schedule means additional burdens and responsibilities which in some cases may be difficult to meet. Indeed, were cancer detection examinations requested by a majority of the adult population, many more physicians would be required to carry this added load. However, it is not likely that, as a consequence of our deliberations here today or the efforts which you and your organizations may later make, doctors will be overwhelmed by these requests. It is far more probable that both the demand for this service and the means for providing it will develop gradually over a period of years. Much has already been done by way of acquainting physicians with this plan and many counties in Michigan and several other states have adopted some form of the Hillsdale Plan suitable to their own communities. But it is not enough merely to set up the machinery whereby cancer detection examinations may be made available to the greatest number at the lowest possible cost. Much more is needed and it is here that you and the groups you represent can make your interest felt.

On the surface it may appear that we, as individuals, here gathered for the purpose of reviewing and renewing the fight against cancer, can do little more than is already being accomplished. Fighting cancer is serious business and sober recognition of the enormity of our problem is better than a flush of optimism which, like the first blush of spring, passes all too quickly. The small army of potential cancer fighters gathered here today represents the advance guard of a vast army—the citizenry of Michigan—whom you represent. Let us now see where we—each and every one of us—come into the picture. What can you and the organizations you represent do to help wipe out cancer mortality in Michigan?

Specifically it is to be hoped that you will do the following:

1. Interest your organization in this renewed fight against cancer sponsored by the Michigan Cancer Control Committee representing the Michigan State Health Department, Michigan Divisions of the American Cancer Society and the Michigan State Medical Society.

2. Have periodic health examinations yourself

3. Urge and continue to urge your friends to have similar examinations.

4. Make cancer detection a part of every regular medical examination now required by your employer or organization. Pre-employment and periodic physical examinations have become a reality in many industries. These examinations must be expanded to include specific cancer detection.

5. Assist in creating a unified local cancer detection program in your own community.

Lest you look upon this as duplication of effort on the part of organizations specifically concerned with cancer, let me point out that this is an urgent invitation from all these organizations that you too put your shoulder to the wheel and help in the fight against a common enemy.

But, and this is important, in so doing, it is not only desirable but necessary that we pull together. There must be unity of purpose without wasteful duplication and dispersion of effort. It has been a simple matter to tell about our aim for the future but bringing it to full fruition requires a unified and co-operative effort. All of which brings me to the second important way in which we seek your co-operation.

The Michigan Cancer Control Committee is presently composed of physicians representing the three organizations primarily concerned with the control of cancer. This is as it should be. However, cancer is your enemy as well as ours. Cancer is a social and economic problem as well as a medical problem. As a means of furthering our attack and uniting our efforts it seems highly desirable that

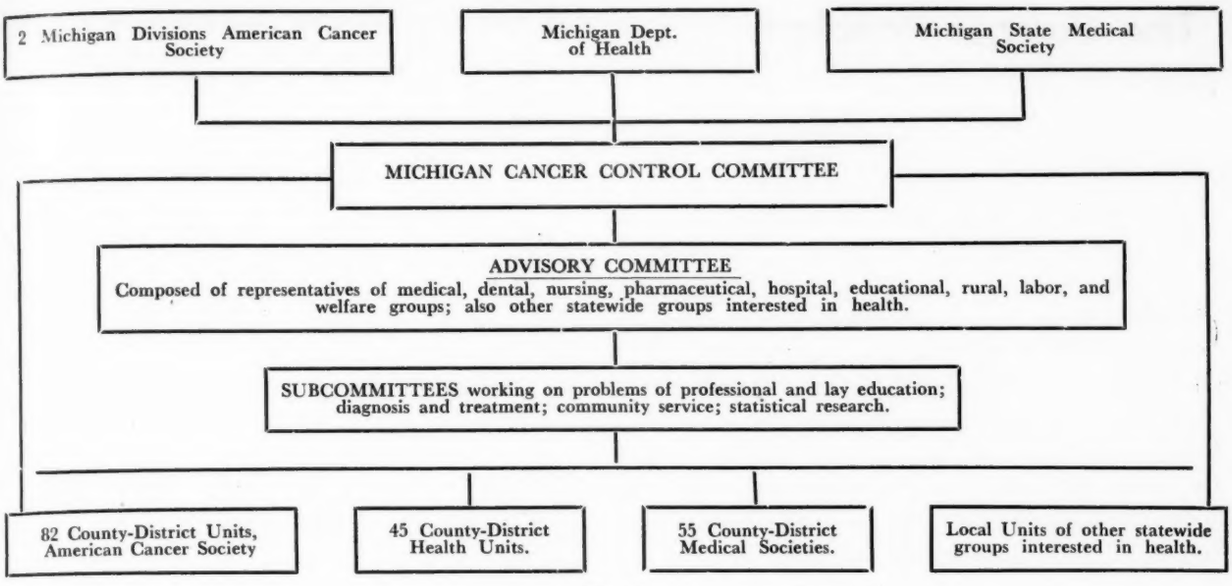
2 Michigan Divisions American Cancer Society
Michigan Dept. of Health
Michigan State Medical Society
MICHIGAN CANCER CONTROL COMMITTEE
ADVISORY COMMITTEE
Composed of representatives of medical, dental, nursing, pharmaceutical, hospital, educational, rural, labor, and welfare groups; also other statewide groups interested in health.
SUBCOMMITTEES working on problems of professional and lay education; diagnosis and treatment; community service; statistical research.
82 County-District Units, American Cancer Society
45 County-District Health Units.
55 County-District Medical Societies.
Local Units of other statewide groups interested in health.

Fig. 1.

we not only consider the calling of future cancer conferences wherein we may review work done and strengthen our attack but further that we develop an interim advisory group or committee fashioned about as indicated in Figure 1.

No one on the present Cancer Control Committee is masquerading under the assumption of knowing *all* about cancer and cancer control. We are, therefore, asking your assistance in an advisory capacity and hope that you, or other duly appointed representatives of your organization, will be willing to meet with the Cancer Control Committee, perhaps once or twice a year, for the purpose of clarification and unification of aims and objectives as well as the discussion of problems not now considered or even recognized. While the plan presented in Figure 1 appears simple enough, its actual capacity for usefulness will in large measure depend on your willingness to participate. Specifically, and for the time being, it is requested that a representative of your organization be appointed to meet in an advisory capacity with the Cancer Control Committee for purposes already stated. The name of the representative should be filed with the Secretary of the Cancer Control Committee at 1313 E. Ann Street, Ann Arbor, Michigan, as soon as possible, so that he or she may be notified of combined committee meetings.

The purpose of today's conference has been severalfold. We have presented data regarding several aspects of the cancer problem. We have stated that the cancer mortality can be reduced tenfold by means now at our command, and finally, we have requested your co-operation and the support of the groups you represent. We hope we have laid the foundation for the greatest and most powerful drive against a common enemy to be found in the entire world today. If you accept our invitation to join in this fight, it is well within the realm of possibility that Michigan will, in time, have the lowest cancer mortality of any state in the Union. We request and welcome your co-operation.

MSMS

"The Administration says to the medical profession: 'Fear us not! We would not socialize medicine. Only give us control of your medical schools and of your research centers! We offer gifts to students and professors (especially pediatricians). Come, follow us down the primrose path to our Federal Utopia! It is much easier for a student to take "easy money" from Washington than to learn how to stand on his own feet. Under our Plan he will never need to be independent and self-reliant because we will take care of him—permanently.'

"Thinking people . . . are realizing that administration proposals must be fought on a united front. Now when a Federal bill is up for debate, the medical profession has nothing to say in opposition unless medicine is directly affected. If it is a bill calling for public ownership of utilities, most doctors say: 'Let the public utilities people worry about that one. We don't want to spoil our public relations by opposing everything.' Similarly, the electrical industry lets medicine worry over compulsory health insurance. They'd better get together."

—AMPS

The Cancer Problem in Michigan

By C. J. Poppen, M.D.
Chief, Cancer and Adult Health Services
Michigan Department of Health
Lansing, Michigan

CANCER IS one of the oldest diseases known. Reference is made to it in one of the earliest medical writings known to Egyptians five thousand years ago. Hypocrates, a Greek, named it five hundred years before Christ. The Romans translated it to the Latin word "Cancer" meaning crab.

In the past, due to the lack of facilities for studying cancer accurately, little headway was made in understanding the nature, causes and control of the disease. Misinformation and fallacies were handed on from one generation to the next so that the public attitude toward this disease has been fixed definitely in erroneous channels through hundreds of years. Many of these erroneous ideas still persist and form the greatest obstacle to the control of this condition.

Facilities for studying cancer have been greatly improved during the last half century, so that today more is known about the nature and the cause of this condition than ever before. Each new scientific fact about cancer offsets some preexisting fallacy, so that the public is no longer justified in maintaining an attitude of hopeless fear that is doing so much to retard the application of effective control measures. Enough is known about cancer today to make possible the saving of thousands of lives if people only knew and used these facts for their protection.

For many years, cancer control programs have been conducted in Michigan by the two divisions of the American Cancer Society, the Michigan State Medical Society and its county societies, and state and local health departments with the assistance of the United States Public Health Service. Research studies in cancer have been under way at some of the colleges, both universities and in hospitals and other institutions in the state.

All of these activities have been beneficial to the people of Michigan in different ways. They have aroused the interest of intelligent laymen in protecting themselves against cancer. They have provided postgraduate education for the physicians of Michigan through special cancer programs. They have extended the lay education and service programs to an ever widening circle of the population, providing better understanding of the cancer problem and measures necessary for its more adequate control.

TABLE I. RANK, NUMBER, AND RATES OF THE TEN LEADING CAUSES OF DEATH IN MICHIGAN
1948 Compared With 1900

Cause of Death	1948	Number 1948	Number 1900	Rates* 1948	Rates* 1900
Heart Disease	1	18,726	2,836	302.3	117.1
Cancer (with Leukemia and Aleukemia)	2	3,261	1,495	133.4	61.8
Cerebral Hemorrhage	3	5,170	1,259	83.5	52.0
Accidents	4	4,017	1,740	64.8	71.9
Nephritis	5	2,473	1,061	39.9	43.8
Pneumonia	6	1,853	2,388	29.9	98.6
Premature Birth	7	1,820	620	29.4	25.6
Diabetes	8	1,771	224	28.6	9.3
Tuberculosis	9	1,561	2,478	25.2	102.4
Arteriosclerosis**	10	1,085	98	17.5	4.0

*Rates are per 100,000 estimated population.
**The 1900 figure refers to "Diseases of the Arteries."

While Michigan has a constructive cancer program, the results so far reveal the need for greater effort in this field. To accomplish this, the Michigan Cancer Control Committee, composed of representatives of the two Michigan divisions of the American Cancer Society, the Michigan State Medical Society and the Michigan Department of Health, has called this first Michigan Cancer Conference.

Cancer is now the second cause of death in Michigan, being surpassed only by deaths due to heart disease. At the beginning of the century and perhaps even later, cancer occupied eighth place as a cause of death but it has since moved progressively in the direction of increasing importance. This shifting of emphasis is the result of a number of factors; one obviously being the increasing control over the infections of tuberculosis, pneumonia, typhoid fever, communicable diseases of childhood, diarrheas and enteritis, which were all among the leading causes of death fifty years ago. We didn't know then that these diseases could be controlled and conquered. We hadn't the courage to say that they could be because we hadn't seen it demonstrated. What can be done where there are earnestness, clear thinking, and facilities is now history. We are in a similar position today with reference to cancer. There are plenty of enigmas and difficulties, but they will be removed if we mean business. We are in the era of cancer control.

The scope of the problem in Michigan is tremendous as shown by mortality reports. Studies

Read at the First Cancer Conference of the Michigan State Medical Society, Lansing, Michigan, October 11, 1949.

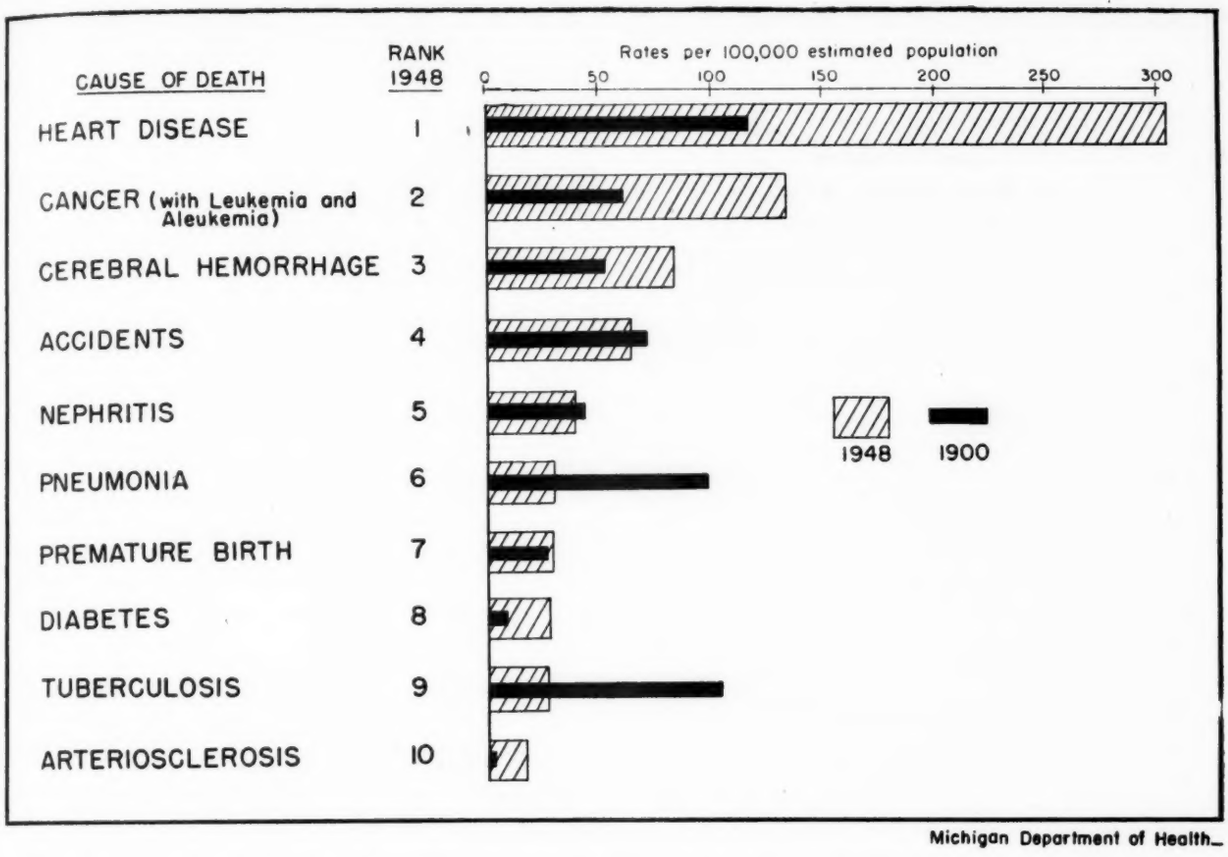

Fig. 1. Number and rates of the ten leading causes of death in Michigan in 1948 compared with the same causes in 1900.

reveal there are more than three living cases of cancer for each reported annual death. Applying this ratio of 3 cases per death, there was a total of over 25,000 cases of cancer in Michigan in 1948. These figures represent the minimum, and the actual existing number of cases is probably greater than the number of cases computed through reported deaths.

The increasing significance of cancer as a cause of death in Michigan is shown in Table II.

TABLE II

Michigan		
Total Cancer Deaths	Rate per 100,000	% of all Deaths
1928—4249	92.4	7.8%
1938—6059	117.1	12%
1948—8336	133.4	15%

Every decade shows a greater probability of death from cancer. In 1928, ninety-two out of each 100,000 population died from this disease. These figures increased to 117 in 1938 and to 133 in 1948.

While the total number of deaths yearly for the period 1938 through 1948 has remained fairly constant, the number of cancer deaths has increased from 6,059 to 8,336. Cancer accounted for 8 per cent of all deaths in Michigan in 1928, 12 per cent in 1938, and 15 per cent in 1948.

This increase in cancer death rate can be attributed in part to two causes: (1) each year an increasing percentage of the state's population is found above age thirty when cancer is more likely to develop, and (2) scientific methods of diagnosis are being improved so that more abnormal conditions are being recognized as cancer than ever before. Many believe that there is an actual increase in the number of people affected each year.

The chances of dying of cancer in Michigan in 1948 by specific age periods in both males and females is shown in Table III and Figure 2. This table and chart show that, while no age is free from cancer, such deaths increase with advancing age. Up to age thirty-five, but 4.4 per cent of cancer deaths occur. The percentage of deaths in females begins to rise sharply at age twenty-five, reaching its peak at age sixty-five, while the beginning of the sharp rise in males is at age thirty and continues to age sixty. After these ages the

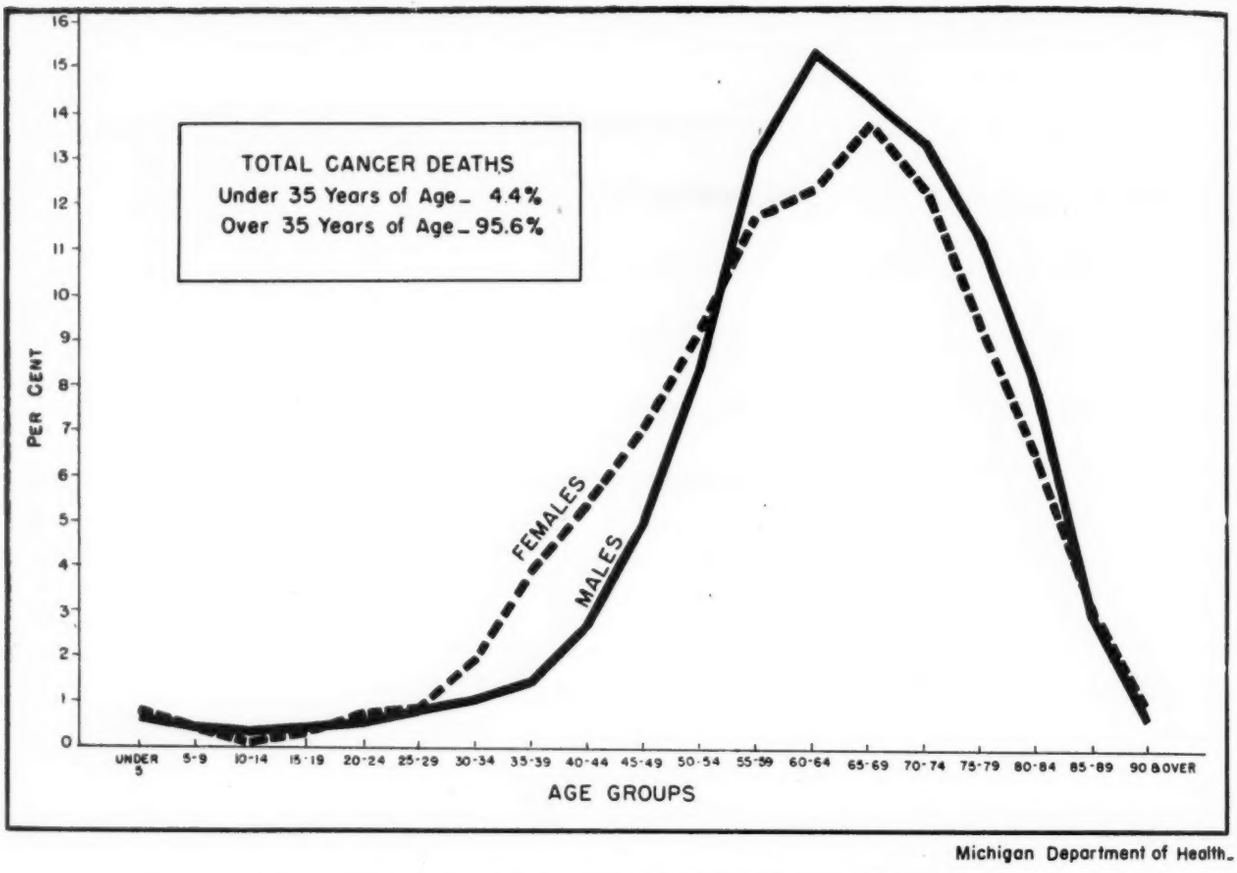

Fig. 2. Percentage distribution of cancer deaths by age and sex in Michigan in 1948.

TABLE III. PERCENTAGE DISTRIBUTION OF CANCER DEATHS BY AGE AND SEX MICHIGAN—1948

Age Groups All Ages	Total 100%	Male 100%	Female 100%
Under 5	0.7	0.6	0.7
5— 9	0.3	0.4	0.3
10—14	0.2	0.3	0.1
15—19	0.3	0.4	0.3
20—24	0.6	0.5	0.7
25—29	0.8	0.8	0.8
30—34	1.5	1.0	1.9
35—39	2.6	1.4	3.9
40—44	3.9	2.6	5.3
45—49	5.9	4.9	7.0
50—54	8.7	8.3	9.2
55—59	12.5	13.2	11.7
60—64	13.8	15.3	12.3
65—69	14.2	14.3	13.8
70—74	12.8	13.3	12.3
75—79	10.2	11.1	9.3
80—84	7.2	8.0	6.4
85—89	3.0	2.9	3.1
90 and over	0.8	0.7	0.9

percentage of deaths in each sex falls rapidly because there are fewer persons living in the older age groups. Were the percentage of deaths in older ages based on the number living in each age group, the curves would have continued to show an ever sharper rise. When charted on a larger scale, deaths under age twenty are shown more nearly in keeping with their importance in relation to cancer deaths as a whole.

TABLE IV. NUMBER OF DEATHS UNDER AGE 20 MICHIGAN—1948

Cancer, Leukemia, Hodgkin's Disease	Tuberculosis	Acute Rheumatic Fever	Diphtheria	Measles	Poliomyelitis	Scarlet Fever	Syphilis	Whooping Cough
132	88	20	7	43	33	1	14	9

Contrary to popular belief, cancer claims a considerable number of lives under the age of twenty. In 1948, there were 132 such deaths. It is of interest to note that, in 1948, cancer caused more deaths in persons under twenty than did any or all of the common communicable diseases and, with the exception of tuberculosis, more than all the other listed communicable diseases combined. Details of these deaths are shown in Table IV.

Cancer is widely distributed in the body; practically every organ and tissue may be the seat of its development. Wherever cellular tissue exists, cancer may be found. The effectiveness of cancer control depends upon early recognition and prompt and adequate treatment of the largest possible

number of cancer patients. The location of the primary lesion, whether easily accessible or inaccessible, plays an important part in early diagnosis.

Up to 1925, cancer deaths in females outranked those in males. For the past three years, this ratio has been reversed. The reason for this is not apparent at this time.

In females, the most accessible body sites for examination are the oral cavity, skin, breast, pelvis and rectum. In these areas, practically all of which are readily accessible for early diagnosis, occur more than 60 per cent of the cancers causing death in this sex. Cancer in the female breast, uterus and other pelvic organs causes 42.2 per cent of all such deaths in this sex. In males, the oral cavity, skin, rectum and prostate are readily examined and will yield a goodly percentage of all the fatal cancers in this sex.

Unfortunately, cancer of the digestive system, which causes 36 per cent of such deaths in women and 46 per cent in men, is difficult to diagnose in early stages, because, with the exception of the rectum, special methods must be employed. The same is true of the lungs, which causes 14 per cent of such deaths in men and 3.9 per cent in women. Seventy-eight per cent of cancer deaths among males is found in the digestive, respiratory and genitourinary systems. Table V shows the percentage distribution of cancer deaths by sex in the most common sites.

The cancer statistics cited are based on records taken from death certificates. I wish I could speak with equal authority on the incidence and prevalence of cancer. I cannot. An accurate record of the number of cancer cases is lacking. Cancer lends itself to the same type of registration as was found to be a prerequisite to effective control of tuberculosis. Cancer has been made a reportable disease in Michigan and it is hoped that in time reliable statistics on the incidence and prevalence of the disease will be available. Registration of cancer cases is necessary to obtain this desirable information and to plan and conduct an effective control program. Through registration programs in many other states, valuable information about the extent of the cancer problem is being obtained. In Hillsdale County in this state, registration of cancer patients has been carried out for the past three years with gratifying results to the physicians and the public. Its extension to all counties will mark a real step forward in the fight against cancer in Michigan.

TABLE V. PERCENTAGE DISTRIBUTION OF DEATHS DUE TO CANCER MICHIGAN—1948

Site	Total	Male	Female
Digestive Organs and Peritoneum	41.1	46.0	36.0
Respiratory System	9.3	14.4	3.9
Breast	9.2	0.2	18.6
Uterus	8.2	.....	16.8
Male Genital Organs	6.1	11.9	.....
Urinary Organs (Male and Female)	4.7	6.0	3.2
Female Genital Organs (Other than Uterus)	3.3	.....	6.8
Brain and Other Parts of Central Nervous System	1.9	2.3	1.4
Skin	1.4	1.8	1.1
Leukemias and Hodgkin's Disease	4.4	5.2	3.7
Other and Unspecified Organs	7.5	7.6	7.4

I have presented the nature and extent of the cancer problem in Michigan. Other speakers on this program will present talks on other aspects of this subject so that a thorough understanding of the problems and their solution may be acquired and an effective control of cancer may be obtained.

To summarize our Michigan cancer problem, I would say:

1. Enough is known about cancer today to make possible the saving of thousands of lives.
2. While Michigan has a constructive cancer control program, greater efforts at control must be made to bring down the death rate.
3. Cancer now ranks as the second leading cause of death; 8,336 such deaths were reported in 1948.
4. There probably are more than 25,000 cases of cancer in Michigan at this time.
5. Although cancer deaths occur at all ages, the probability of death due to cancer increases with age.
6. Cancer is an important cause of death in younger age groups.
7. More than 60 per cent of cancers in both sexes are readily accessible for diagnosis. A detection program aimed primarily at these accessible sites gives promise of finding many cancers in early and curable stages.

In conclusion, there is unnecessary suffering and death from cancer which may be relieved or removed through a comprehensive control program. This program must include the activities of all interested organizations, groups and individuals, so that an integrated and united effort may be made to give more effective direction to the control of cancer in Michigan. The job can and must be done.

The Hillsdale Plan in Action

By Arthur W. Strom, M.D.
Hillsdale, Michigan

THE PROGRAM for tumor detection, which has become known as the Hillsdale Plan, was begun by members of the Hillsdale County Medical Society in January, 1948. In the summer of 1947 a survey made under the auspices of the Cancer Control Committee of the Michigan State Medical Society of all cancer cases treated by Hillsdale County physicians in the calendar year of 1946, showed that over 60 per cent of these people had cancers of the skin, breast, uterus and rectum, and that all of these sites could be readily examined by physicians in their own offices without special equipment. Lay groups, such as woman's clubs, the Grange and the local chapter of the American Cancer Society, were interested in the institution of a detection center or some other method whereby individuals could secure cancer detection examinations.

With the guidance of the Cancer Control Committee of the Michigan State Medical Society, it was our decision to make every doctor's office a cancer detection center, since such a procedure would entail no additional cost for extra office space or special assistants, and would not draw too heavily on any one physician's time from his routine practice. Of the eighteen practicing physicians in Hillsdale County, thirteen are doing tumor detection examinations under this plan.

During the winter of 1948, extensive local newspaper publicity was given to this plan, practically all of which was in the nature of news stories about the 1947 survey and the readiness of physicians to receive patients for examination. Much publicity work was carried out by the Hillsdale County Health Department, service clubs, the local chapter of the American Cancer Society and individual physicians. Interest aroused by the initial publicity, together with the satisfactory results of the examinations, has maintained the number of examinations at a high level without subsequent organized publicity efforts.

Originally only women over forty were urged to be examined once each six months, but younger women and also men were given tumor detection examinations if they were requested. Now the examinations are recommended to all ages of both sexes.

The examination procedure is not complicated. The patient makes an office appointment with the physician of his choice, usually his family physician, for the examination which is usually made within a few days, thus elimiating any backlog or long waiting periods. Another group of patients undergoing tumor detection examinations are those visiting their physicians at periodic intervals for chronic diseases such as diabetes, arthritis, and heart disease, on whom detection examinations are made every six months with their co-operation and consent. The patient is weighed, the temperature and pulse rate recorded, and the urine tested. After disrobing and draping, questions are asked regarding symptoms which might indicate cancer and a general physical examination is carried out. This includes examination of the skin, tongue, gums, inner cheeks, throat, neck, breasts, heart, lungs, abdomen, genital organs and rectum. The blood is tested for anemia if indicated.

Should history and examination reveal suspicious or definite evidence of tumor, the patient is so told, and arrangements are made for securing a small piece of suspected tissue for microscopic examination to prove the diagnosis. If x-ray examinations are indicated, arrangements are made for them to be made at the local hospital. All suspicious cases are studied until cancer is or is not proved. Even though the examination reveals no evidence of tumor, re-examination at six-month intervals is advised. This re-examination is very important for those past middle life.

Needless to say, many abnormal conditions other than cancer have been found and advice given for their correction. Time does not permit a cataloging of these conditions, some of which are classed medically as precancerous diseases. Certainly one of the largest groups has been women of middle age with abnormal conditions of the cervix, or the mouth of the womb. It has been reliably stated that cancer rarely develops in a normal healthy cervix; the return to normality of a diseased cervix after treatment has forestalled the development of cancer in many cases, we feel sure.

Simple records are kept of the examinations and reported monthly to the County Health Department which maintains a confidential file for statistical purposes. This file is available only to the cancer committee of the Hillsdale County Medical Society and other properly authorized persons.

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

How much does this examination cost? A charge of $4.00 or $5.00, which is the usual fee in this community for a physical examination, is made by the examining physician. There are additional charges when special laboratory or x-ray examinations are necessary. For those persons to whom the examination fee is a hardship, loan funds are available from the local chapter of the American Cancer Society with which this fee can be paid. The cost of record forms was less than $10.00 per doctor co-operating in this plan, and was paid from funds of the Hillsdale County Medical Society. The cost of part time clerical work in keeping the central master file is borne by the County Health Department.

In the first nineteen months the plan has been in operation, through July, 1949, 1,950 examinations have been made, of which 1,547 were original examinations, 324 second examinations and seventy-nine third examinations. Fifty-four cases of cancer were found. This is 2.7 per cent of all examination and 3.49 per cent of the individuals examined. Of the fifty-four cases found, thirty-two (60 per cent) were early or only moderately advanced, offering probability of cure by treatment.

According to the U. S. Census population for 1940, 17.5 per cent of the females over forty in Hillsdale County have had one or more examinations since this program began.

It should be pointed out that these 1,547 people had never before had an examination for cancer. Even those found with advanced cancer had never consulted a physician regarding their condition previous to this examination. No cancer patient already known to his physician or whose cancer was discovered by examination when ill in the hospital or at home has been included in the examinations reported above. There were fifteen additional cancers in this latter category and practically all were far advanced.

The chief difficulty encountered in making this plan more effective is that of securing the patient's co-operation in returning for examination each six months. Every patient originally examined has been advised of the desirability of such re-examinations, and a fair percentage has returned for them. A personal letter from physician to patient is under consideration for those who fail to return at six-month intervals.

Experience gained in carrying out this program indicates the need for a continuing lay educational program to accompany the examination procedure. There is still a tendency on the part of those examined to consider one examination with negative findings as assurance against cancer for an indefinite period. Education is needed to break down this dangerous attitude and to demonstrate that their protection against the development of cancer to a dangerous extent depends on their faithful return for semiannual examinations.

The program has stimulated participating physicians to a much keener interest in cancer diagnosis and treatment. It has also made necessary an expansion of hospital facilities in the departments of radiology and pathology for the further service to these added cancer patients. These expanded hospital facilities have increased the services for maintaining the community health which has profited because of the Hillsdale Plan for Tumor Detection. By this plan we are exerting a more effective effort than ever before in detecting and successfully treating cancer in our community.

While physicians have many other diseases to consider in their daily practice, Hillsdale County physicians will continue to meet the demand for cancer detection examinations to the limit of their time.

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BLOOD BANK INFORMATION ASKED BY AMA

As a first step in determining the capacity, equipment, personnel, inventory, general processing procedures, and arrangements for emergency co-operation among blood banks, a survey of blood banks has been mailed by the Bureau of Medical Economic Research of the American Medical Association.

A questionnaire has been mailed to more than 1,500 blood banks and 5,000 hospitals which have no blood banks. Certain facts about blood utilization by hospitals are needed to complete the portion of the study being covered at the present time.

In order to simplify the printing and statistical analysis, one questionnaire form is being used for two purposes in preference to two separate questionnaires. To differentiate between the two, the blood bank questionnaire is printed in black and the one for hospitals without blood banks is printed in blue. The identification is shown on the top of the first page of the questionnaire. Blood bank and hospital administrators are urged to return the replies promptly, filling the forms in as accurately as possible, even if questionnaire printed in the wrong color is received. This can be noted below your signature.

Cancer of the Breast

By U. V. Portmann, M.D.
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IT WOULD SEEM that since the breast is superficial and accessible to examination, cancer in it would be discovered early, treated promptly and have a high curability rate. But this is not true. Too frequently women do not discover cancers in the breast before they are well advanced because it is difficult to detect small tumors even by careful palpation, especially in obese individuals. Also, when aware of changes in the breast, some women delay having a physician examine them because they have no pain, they fear cancer, or for economic or other reasons. It has been found that delay in treatment may be attributed to the patient in about 65 per cent of instances. This figure can be reduced by lay education, allaying fear and periodic examinations.

It is regrettable that delay in 25 per cent of instances also has been attributable to bad medical advice given patients who discovered lumps in the breast or other signs of cancer and went to physicians who did not examine them carefully, who advised them to disregard the indications, gave local medication and instructed them to return if anything more serious should develop. In one investigation it was found that the delay in treatment after unwise medical advice was thirteen months and that the delay of six months had cut the cure rate in half. The reasons for unsound advice may be that some physicians are not suspicious of innocent appearing breast tumors or expect the typical textbook descriptions of cancer which are signs of advanced and incurable disease.

Every physician should carefully examine the breasts of women patients whether or not they complain of symptoms referrable to these organs. If this is done, many cancers may be discovered and treatment begun immediately. There are many diseases of the mammary gland in addition to cancer which have more or less characteristic signs and symptoms which must be recognized. [Some of the conditions for differential diagnosis include anomalies: abnormal anatomic and physiologic alterations associated with endocrine disturbances which are usually manifest in infants or adolescents but also appear in adults in association with dysfunctions of the ovaries, adrenals or hypophysis; normal alterations in size and shape during the puerperium and lactation; galactocele due to obstruction of lacteal ducts during lactation; acute mastitis and abscesses due to infection; chronic mastitis of tuberculosis, syphilis or mycoses; subacute mastodynia; plasma cell mastitis; adenosis; chronic cystic mastitis; benign tumors including solitary cysts, intraductile and intracystic papillomas, fibroadenomas and several uncommon types.]

The treatment of cancer of the breast requires co-operation of the physician, surgeon, radiologist and pathologist. Those who examine patients with manifestations indicative of disease of the breast should be capable not only of making a differential diagnosis and suspecting the possibility of cancer when tumors are present but also of deciding the most appropriate method of treatment. Surgeons and physicians should recognize the limitations of operations for cancer and radiologists be aware of the indications for operation. The pathologist must not only make microscopic examinations for diagnosis but should also determine the extent of involvement by means of his studies of all tissues, including every lymph node removed.

Surgical procedures have been used for centuries in treatment of cancer of the breast, but it was only a little more than fifty years ago that few, if any, patients were cured. At that time Halstead and Willy Meyer described the technique and results of radical mastectomy. Since then results have improved materially. Also, at about the same time roentgen rays and radium were discovered which were found later to have carcinocidal effects and therefore to be useful in treatment of cancer of the breast. However, there has been disagreement and uncertainty regarding the indications, benefits and results of irradiation. This is due principally to reports in which comparisons of surgical and radiological procedures have been made without classifying cases according to anatomic extent of involvement. There can be little doubt that patients are usually referred to radiologists only when in advanced stages of disease with recurrences or metastases, or when they are surgically incurable. The results of irradiation for such cases cannot be compared with those of less extensive involvement which have only been operated upon.

Several methods of classifying cancers of the breast based on their clinical manifestations have

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From the Cleveland Clinic and the Frank E. Bunts Educational Institute.

been suggested. One of these consists of dividing cases into the "operable" and "inoperable". However there are differences of opinion regarding these terms and their definitions. All cancers of the breast can be attacked surgically but whether or not a patient should be operated upon may depend upon the surgeon's estimate of his own skill rather than his ability to benefit the patient. Also, there are cancers of the breast of extensive involvement but without clinical manifestations which will prove to be incurable after pathologic examination. For example, there may be metastases in many axillary lymph nodes. Therefore classifications based upon clinical criteria alone are not satisfactory in deciding the indications and limitations of different methods of treatment on the basis of statistical results.

Pathologists have classified cancers of the breast into several histologic types and attempted to grade them for prognosis according to degrees of differentiation or undifferentiation of the tissues. However many cancers of the breast are a mixture of different types of histology and degrees of differentiation. Also, a cancer of presumably high malignancy may be limited and therefore curable, whereas a low grade highly differentiated cancer may be incurable because of the degree of extension. Therefore classifications based on pathologic criteria alone are not satisfactory in deciding methods of treatment or comparing the results.

Undoubtedly the most satisfactory method of classifying cases of cancer of the breast is to weigh all clinical and pathological evidences of the extent of involvement. By the use of such classification it will be possible to decide upon the indications and limitations of different therapeutic procedures and make equitable comparisons of results obtained. The accompanying classification based on both clinical and pathological manifestations of extent of involvement was developed in 1937 for an analysis of our series of over 800 cases.

Indications and limitations of surgical and radiological methods of treating tumors of the breast may be discussed on the basis of the anatomical extent of involvement as outlined in the suggested classification.

In many instances it will be impossible to differentiate clinically between benign and malignant neoplasms of the breast, although the rate of growth and age of the patient may indicate the probable character of the tumor. Under such circumstances biopsy and microscopic examination of the tissues is necessary.

Group or Stage I

Skin—not involved.
Tumor—localized in breast and movable.
Metastases—none in axillary nodes or elsewhere.

Group or Stage II

Skin—not involved.
Tumor—localized in breast and movable.
Metastases—few axillary nodes involved, no metastases elsewhere.

Group or Stage III

Skin—edematous, brawny red induration or inflammation not obviously due to infection, extensive ulceration, multiple secondary nodules.
Tumor—diffusely infiltrating breast, fixation of tumor or breast to chest wall, edema of breast, secondary tumors.
Metastases—many axillary nodes involved or fixed. No clinical or roentgenologic evidences of remote metastases.

Group or Stage IV

Skin—as in any other group or stage.
Tumor—as in any other group or stage.
Metastases—axillary and supraclavicular nodes extensively involved. Clinical or roentgenologic evidences of remote metastases.

Biopsy of small, localized, movable tumors of the breast by aspiration needle or similar methods is not always reliable and may lead to erroneous conclusions. Occasionally benign and malignant tumors may be present concomitantly and near each other. A carcinoma may be cystic or a cyst contain carcinoma. Therefore aspiration may reveal only benign tissue or cystic fluid even when cancer is present nearby. When this occurs an erroneous diagnosis may be made, which results in improper treatment. Aspiration biopsies are satisfactory however, for confirming diagnosis in cases with frank clinical manifestations of cancer.

When there is doubt about the character of a small breast tumor, the safest procedure for biopsy is immediate excision and microscopic examination. If the tumor is benign, no other treatment is necessary; if malignant, the surgeon must decide how to proceed. In most cases radical mastectomy will be performed in order to investigate and remove the axillary contents, because even small cancers may metastasize to axillary nodes without presenting clinical evidence.

If, after microscopic examination of each lymph node, no evidence of metastases is found, the case

may be classified as Group or Stage I. Approximately 25 per cent of all cases operated upon will be in this category, and the general average of five-year survivals will be about 85 per cent by operation alone. However, about 15 per cent in which no involvement of axillary lymph nodes is detected, even microscopically, die of cancer within five years. The reason is that not all cancer was removed even in these early cases or the growth had metastasized to other tissues than the axillary nodes. This may occur from inner quadrant neoplasms which extend to the internal mammary, parasternal and anterior mediastinal nodes.

It is illogical to give preoperative roentgen therapy to a localized tumor in the breast before the correct diagnosis has been established; this may best be done by complete excision. Also routine postoperative treatment is unnecessary for Stage I cases because the curability rate by operation alone is high. Furthermore, there is no way to tell in cases which will not be cured surgically where the residual cancer tissue or metastases are located nor what regions to treat. However, some surgeons advise postoperative roentgen therapy even for Stage I cases. They fear undetectable metastases in lymph nodes and possible criticism by patients who might subsequently develop metastases. In our experience postoperative roentgen therapy of Stage I cases has not increased survival rates.

Clinically undetectable metastases to axillary lymph nodes may be found after operation in patients with small, localized, movable cancers. However, radical mastectomy was justifiable because of the uncertainty about the true character of the tumor or extent of involvement prior to operation. When only a few nodes are found to be involved, perhaps 25 per cent of all, such cases may be classified in Group or Stage II because the prognosis is less favorable than if no nodes are involved. About 25 per cent of cases operated upon will be in this category, and the general average of five-year survivals will be less than 50 per cent by operation alone.

Neither is preoperative roentgen therapy indicated for Group II cases, because the diagnosis cannot be established until after operation. However postoperative roentgen therapy should be given, especially to the axilla and supraclavicular regions, because it may delay the growth of undetected cancer in these areas.

Although local recurrences in the chest wall or axilla seldom occur in Stage I or II cases, it is obvious that extension must have taken place beyond the anatomic limits of operation because at least 50 per cent of the latter group die of cancer within five years. The most common route of metastases is to the axilla, then to the supraclavicular and infraclavicular nodes. Therefore, since there is adequate proof that roentgen rays destroy some cancer cells and delay growth of malignant tissue, it would seem logical to administer treatment postoperatively to the regions where metastases may have taken place. Although this procedure may not cure, because cancers of the breast are inherently radio-resistant, it will increase the five-year survival rate of approximately 10 to 15 per cent of Stage II cases.

There is disagreement even among radiologists about the value of postoperative roentgen therapy, but there are few statistical reports based on classified cases from which satisfactory conclusions may be drawn. However, we constantly urge early treatment of cancer. Therefore, when residual cancer is known to exist, as it does in at least 50 per cent of Group II patients operated upon, it would seem advisable, logical and necessary to attack it immediately by the only method available, radiation therapy, even though the percentage of survivals is not increased remarkably.

Amazingly, some surgeons have contended that recurrence or metastases appeared sooner than would be expected in patients given postoperative irradiation. These conditions develop in spite of the treatment and indicate that cancer tissue remained after the operation, which was unsuccessful as far as cure is concerned. Recurrences and metastases may develop a few weeks or years after operation, and no one can forsee when this will occur. Actually there is abundant experimental and clinical proof that irradiation may inhibit development of cancer cells or destroy them and that irradiated tissues resist their growth. Unfortunately irradiation does not always cure.

Some patients appear to have localized tumors of the breast, normal skin and no clinical evidence of metastases, but it is evident after operation that many axillary lymph nodes are involved. Although operations were justifiable, the prognosis is no more optimistic than for patients with clinical evidence of more advanced disease. The five-year survival rate is in direct proportion to the number of lymph nodes involved; therefore, patients with metastases in many nodes may be classified in Group or Stage

III. The general average of five-year survivals after operation alone for such cases is not more than 15 per cent. This can be increased by postoperative roentgen therapy in about 10 per cent.

Malignant tumors of the breast begin as localized masses of neoplastic cells, which as they grow, progressively increase the size of the masses and invade surrounding tissues. Eventually the invasion will manifest itself clinically in a number of ways in the skin, the degree of involvement of the breast and underlying tissues and as metastases to regional lymph nodes. These clinical signs of extent of involvement, some of which have been listed in the classification for Group or Stage III, are indications of advanced incurable disease which will be discussed later. About 30 per cent of all cases in our series were in this category when first examined. The general average of five-year survivals following operation alone is approximately 5 per cent and can be increased by roentgen therapy to 10 or 15 per cent.

Another Group or Stage IV must be made to include patients who have remote metastases on initial examination, whether or not there are local manifestations of advanced disease. The metastases may be found in the lungs or bones by routine roentgenologic examinations which should be made of every patient prior to treatment. Also, included in this category are patients with palpable enlarged supraclavicular nodes, involvement of the opposite breast or contralateral lymph nodes or clinical evidence of involvement of other viscera such as the liver or brain. Approximately 20 per cent of all cases in our series had evidence of remote metastases on initial examination. These cases are incurable though about 5 per cent may survive five years without treatment.

Groups III and IV have constituted almost 50 per cent of the cases of primary cancer of the breast we have seen, and the survival rate following operation alone has been no higher than the average life expectancy of patients who have had no treatment. This observation also led me, in 1937, to evolve what I call the "Criteria of Incurability" which are listed in simple form:

The Skin

1. Edema (orange or pigskin) of more than slight extent.
2. Ulceration of more than slight extent.
3. Brawny red and inflammed not obviously due to infection.

The Breast

1. Diffusely edematous.
2. Diffusely infiltrated.
3. Secondary tumors.
4. Fixation of tumor or breast to chest wall.

Metastases

1. Axillary lymph nodes numerous, extensively involved and fixed.
2. Supraclavicular lymph nodes or edema of the arm.
3. Involvement of contralateral breast or lymph nodes.
4. Remote metastases in bones, lungs or other viscera.

The presence of the signs listed in these "criteria" should be looked for by physicians and surgeons when examining every woman with a tumor of the breast. There is abundant proof that life may actually be shortened by dissemination when cancer is incised. Anyone referring patients for surgery or attempting to operate (especially upon women with any of these criteria) should consider the following quotation from an eminent surgeon and a collaborating pathologist: "The widespread disrepute in which cancer surgery is held by laity is due in large measure to a willingness on the part of some surgeons to accept hopelessly advanced cases for radical operations—the indications for palliative operations are seldom met with—and in the absence of such, any operation, the purpose of which is merely to remove as much malignant tissue as possible, or in cases where complete removal is clearly out of the question, should be strongly condemned. Operations of this type contribute nothing to the comfort of the patient nor prolongation of life; on the contrary, the end frequently is hastened by exciting the disease to more active growth".

The foregoing discussion and quotation brings up the question of how patients with such signs of incurability should be treated. The only available methods of proven efficiency are roentgen ray and radium therapy and endocrine therapy for palliation. Therefore, patients in this classification should be referred to radiologists for treatment. Adequate irradiation of patients with incurable breast cancer will result in approximately 15 per cent five-year survivals; more survive each year than among those operated upon or not treated. Although irradiation may not cure it will be palliative, and prolong the lives and economic usefulness of many patients.

In some of the patients adequately irradiated, the cancers and lymph node metastases become

smaller, no longer palpable and the breast fibrosed. Indications such as these encourage an inclination to operate. In our experience operations following irradiation for incurable cancer invariably have revealed neoplastic tissue still present in lymph nodes and a well fibrosed breast. It is my impression that these patients did not survive so long as they might have if no operation had been performed. Therefore it may be concluded that irradiation does not make patients with "criteria of incurability" surgically curable.

The technique of radiologic procedures need not be discussed. It may be of interest to mention sex hormone therapy.

Sterilization by roentgen irradiation may be considered a form of hormone therapy. Sterilization by roentgen therapy should be performed for all patients who still menstruate and show some criteria of incurability, for those who have local recurrences or remote metastases. The progress of disease seems to be delayed frequently enough to warrant sterilization as a routine procedure. The question of sterilizing women with metastases only in lymph nodes depends upon the extent of involvement and the age of the patient. Sterilization is not advisable for young women when metastases are found only in a few axillary nodes or until more remote metastases appear. Although pregnancy may hasten the development of cancer of the breast, many women with minimal axillary involvement have given birth to children without ill effects. However, women approaching the menopause are grateful for cessation of the menses.

After sterilization some women complain of vasomotor disturbances or "hot flashes". It is not advisable to administer hormone therapy for relief because false menstruation manifested by slight irregular vaginal bleeding may be induced and the cancer stimulated. Sedative medications are preferable.

Many women with local recurrences, metastases from cancer of the breast or other incurable indications are benefited from administration of sex hormones. Although it has been proved experimentally and clinically that estrogens may induce cancer of the breast and stimulate the rate of growth, it seems paradoxical that large doses also cause an opposite effect, resulting in retardation of the disease, especially in soft tissues of older women. Stilbestrol may be given orally in doses of from 10 to 30 mg. per day. This administration has resulted in improvement and regression of primary cancers, local recurrences and lymph node and pulmonary metastases and a sense of well being in a number of cases. However, the results are inconsistent and best in women sixty years of age or older. In young women there is danger of accelerating the disease.

Androgens seem to be more effective for young women and for patients with osseous metastases. Primary tumors and lymph node metastases also may be influenced beneficially and diminish in size. We have used testosterone propionate intravenously 100 mg. three times a week, but half this dose may be effectual. In some cases spectacular relief of pain from osseous metastases has resulted in a few days, but in other patients benefit has not been observed for two or three weeks. In the meantime, often there is improvement in appetite, gain in weight, a sense of well being and strength increase. However the results are variable. In not a few cases the roentgenologic appearance of osseous metastases changes with apparent new bone formation. In others, symptomatic relief may be obtained without change in the appearance of metastatic lesions. Unfortunately in some patients the entire disease process seems to be accelerated.

Conclusions

1. Cases of cancer of the breast may be and should be classified according to clinical and pathological manifestations of anatomic extent of involvement in order to determine the indications and limitations of different therapeutic procedures and their results. A classification is suggested.

2. Patients not classified under the "criteria of incurability" should be operated upon. When axillary nodes are involved, postoperative roentgen therapy should be given.

3. Patients with more than one indication listed in the "criteria" should be treated by radiologic procedures alone.

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for a maximum of sixty days in any benefit year but only thirty days for tuberculosis or mental diseases. Other benefits included would be payment for chemical, bacteriological, diagnostic x-ray and related laboratory services; x-ray, radium, and related therapy; physiotherapy; services of optometrists; and prescribed drugs which are unusually expensive, special appliances, and eyeglasses; as the Board by regulation designates as auxiliary services, practical, and essential to good health care.

—A.M.A. Washington Bureau Analysis.

Diagnosis and Treatment of Anorectal Diseases

By Harry E. Bacon, M.D., F.A.C.S., F.R.S.M., and Timothy F. Moran, M.D.

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THE SHARP progressive decline in the morbidity and mortality rates of anorectal diseases can be attributed almost solely to the relentless work of those interested in this portion of the intestinal tract, particularly in regard to early diagnosis and treatment. Through this method of attack the general public will realize the prominent position that the field of proctology holds among the higher specialties and as a result will present themselves for examination at the earliest possible time following the onset of an anorectal disorder. The progressive uprooting of the fear of rectal surgery has been a strong factor in the production of good results.

Pruritus Ani

This syndrome embodies an alteration in the skin due to an irritation in the peripheral nerve ending, caused by some local or constitutional disease. Whatever the initiating cause may be, eventually as a result of the prolonged irritation, trauma from scratching, or chemical dermatitis from medication, there develops a thickening of the perianal skin, lichenification of the dermis and hypertrophy of the marginal folds with cracks and ulceration. The importance of the dietary regimen should not be underestimated. Not only are certain foods irritating in themselves, but the manner in which even bland foods are prepared and seasoned may render them unsuitable. Such foods as oatmeal, fish, oysters, clams, crabs, lobsters, cheese, pickles and cucumbers are interdicted. Excessive eating and the use of condiments and alcoholic beverages should be avoided. Outdoor exercise several times daily should be advised for the individual with sedentary occupation. In some cases considerable improvement has followed the local use of pyribenzamine (2 per cent in cream) and capsules of benadryl or dilantin sodium by mouth. In the first stage of simple erythema, cornstarch enemas, dusting powder (either talc or cornstarch) and the insertation of a piece of cotton between the folds may be valuable. Where moisture and maceration are present, the following may be applied:

℞
Phenolis mxxx
Glycerin ℥i
Menthol
Camphor pulv. agar i
Resorcini ℥iss
Acidi Borici ℥iii
Bismuth subnit ℥ii
Liq. calcis qs. ℥vi
Sig: Apply q. 3 hours.

Where the skin is dry, brittle and leathery, massage following the application of cod-liver-oil ointment may give good results. One of the following is of value: Ung. Picis, 2 per cent; Ung. ichthyoli, 5 per cent, or Ung. Hydrargyri, 5 per cent. The hypothesis of Besredka, as applied to the pruritic syndrome, entails the taking of cultures from the anal and the perianal regions. From these cultures an autogenous vaccine is prepared which is injected into the pruritic area. The injection of absolute alcohol has been valuable in many instances. In our experience, surgery is instituted only after any co-existing pathologic condition has been corrected and at least one or even two forms of the injection treatment have been given a fair trial. The operative means of combating pruritus ani is confined to (1) severance of the sensory nerve filament supplying that skin, (2) the removal of the diseased skin, and (3) division of the peripheral nerves following their identification by means of a faradic current. Undoubtedly, the most popular procedure is the Ball operation or one of its modifications.

Hemorrhoids

This condition, according to estimates, comprises about 30 per cent of all anorectal disorders. Nearly everyone during his life span has symptoms caused by hemorrhoids, and at some time many will require measures for relief.

Hemorrhoids represent varicose dilatations involving one or more radicles of the hemorrhoidal veins. Pathologically, the condition is one of degeneration in which thrombosis, rupture, inflammation, ulceration and necrosis may occur. Good results are to be obtained by the injection treatment, provided the cases are selected carefully. This form of therapy is indicated only in uncomplicated internal hemorrhoids. The high percentage of recurrence materially limits its field of use-

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fulness. Experience has taught that a hemorrhoidectomy properly performed is the procedure of choice. Unfortunately, the surgical removal of hemorrhoids is occasionally followed by hemorrhage, immediate and remote; severe pain, anal stenosis, residual infection, abscess formation, fissure and recurrence of the hemorrhoids. The occurrence of such sequelae is due largely to the operative technique, the lack of knowledge of the anatomy of this portion of the anorectum, the pathologic process itself, unecessary trauma, failure to preserve adequate anal and perianal skin, inclusion of the sphincter muscle in the clamp or suture, and inadequate aftercare. We believe very strongly that the care of the patient with hemorrhoids is not completed at the time of his discharge from the hospital.

Abscess

Localized collections of pus in the region of the anorectum demand surgical treatment. Their importance should not be underestimated, since neglect and delayed or improper intervention result frequently in extensive tissue destruction, multiple fistulas, permanent incontinence and general debility. Formerly it was our practice to incise and drain unilateral and bilateral abscesses of the ischiorectal type and correct the fistula later. In an effort to avoid multiple operations and protracted periods of hospitalization and convalescence, an attempt is now being made to locate the primary or internal opening at the first examination. In this type of abscess the anorectal line is carefully examined, visibly, digitally and by means of a hook for a crypt or a breech in the continuity of the skin or the mucous membrane.

At the maximum point of fluctuation and beyond the outermost border of the external sphincter muscle a stab wound is made into which a flexible metal probe is introduced gently toward the primary opening. The skin incision is carried to such a point that the excision of the fistulous tract is at right angles to the fibers of the external sphincter muscle. The skin over the abscess cavity is excised widely to permit adequate drainage. A single strip of petrolatum gauze may be placed in the fistulous wound for a period of twenty-four hours. The best procedure for the novice is to incise and drain the abscess and then remove the fistula later. We have performed this maneuver in selected cases in several hundred instances and seldom have encountered a recurrence. Operative wounds are rarely packed and never for more than forty-eight hours. Hot sitz baths are employed three times daily.

Fistula

An anorectal fistula may be defined as a pathologic tract or abnormal communication between the anorectum and some adjacent tissue viscus or skin surface. Invariably, all fistulàs are preceded by abscess formation, which in turn usually originates from an infection entering through a crypt of Morgagni situated at the anorectal line. The history of a previous abscess near the anus, followed by a discharge of purulent material, is highly suggestive of fistula in ano. Examination of the perianal region usually reveals a small depression in the skin itself, in the center of an excrescence or in a scar from a former incision. Horseshoe fistulas have an opening on either side of the anal orifice, and the subcutaneous fibrous cordlike tract may be traced easily from one opening extending around the anus to another opening on the opposite side. The diagnostic use of dyes in our experience is very limited. A disadvantage of this procedure is that the dye follows the line of least resistance and often penetrates the wall of the tract, escaping into the tissue and thus masking its true extent.

Excision of the fistula tract en bloc is the only procedure to be recommended and entails the removal of the tract itself, together with both the internal and external openings. The resultant wound is never packed. In all instances meticulous after-care is of utmost importance to ensure proper healing.

Prolapse

This condition is seldom recognized, except in those cases which present extensive prolapse or procidentia. Structural, mechanical or inflammatory factors which tend to diminish the normal fascial, muscular, or peritoneal supports of the rectum and thereby increase the motility are conducive to prolapse and/or procidentia. To one accustomed to the use of the proctosigmoidoscope with the patient in the inverted or knee-shoulder position, varying degrees of mucosal prolapse are easily discernible. Only too frequently these patients offer a history of chronic constipation, an indeterminate type of pressure, a fullness or weight in the pelvis, and incompleteness on evacuation of the bowel. Careful examination discloses complete absence of the normal mucosal pattern and partial

or complete obliteration of the valves of Houston. Marked redundancy and reduplication of the rectal mucosa will be noted by digital examination and through the sigmoidoscope. Not infrequently the condition is associated with a redundant sigmoid, as evidenced by roentgenographic study following an opaque enema.

In children, prolapse is usually amenable to injections of quinine and urea hydrochloride or phenol in oil given in ¼ c.c. dosage circumferentially at graduated levels. In adults, a modification of the procedure advocated by Murietta in 1938 is ideal.

For procidentia, the surgical approach should be abdominal, embodying fixation, obliteration and occasionally plication.

Chronic Ulcerative Colitis

This disease-entity, described by some as thrombo-ulcerative proctosigmoiditis, is an inflammatory condition involving the mucosal surface, spreading into the muscular and serosal coats. In approximately 95 per cent of the cases the process originates in the rectum and sigmoid. From our observations, it spreads by direct extension along the wall of the bowel and not by the lymphatics or the blood stream. It is characterized pathologically by typical changes in the intestinal wall and clinically by its progressive course, the passage of frequent bloody, mucopurulent discharges, tenesmus, abdominal pain and general lassitude.

The value of proctosigmoidoscopy in routine examination can be understood readily. Early in the disease the mucosa exhibits a rather diffuse hyperemia. As the process continues, edema and pitting are apparent. Minute yellowish abscesses may be seen beneath the mucosal layer, which upon rupture form ulcers that give a motheaten appearance to the lining of the membrane that has already become granular. In some cases an ironed-out or rounded appearance of the valve edges is discernible. At a later stage, the confluence of these petechial ulcerations form large ragged areas. Fever of the septic type is not uncommon, especially during the acute stage or in an exacerbation of the chronic stage. Ordinarily the blood count discloses a secondary anemia and a mild leukocytosis. In all these cases it is highly expedient to study the case thoroughly in order to rule out a specific influence. Smears are made by scraping the rectum mucosa, and from the pathogenic organisms thus isolated, a vaccine is prepared. An opaque enema is administered to determine the upper extent of the disease process. In febrile cases bed rest is imperative. An attempt is made to correct factors influencing the physical and mental status of the patient. In fulminating cases parenteral feeding is employed; otherwise, a diet that is of low residue, bland, high in calories, vitamins and proteins, yet low in starch and sugar, is prescribed. We have found that frequent small blood transfusions have been very efficacious. Retention enemas of cod-liver oil may be used judiciously. For diarrhea, kaomagma or kaopectate by rectum and by mouth is usually satisfactory. A mixture of bismuth subcarbonate 3ii in warm olive oil 3iv by rectum every four hours may be beneficial.

Vitamin therapy has played an important role in the amelioration of this condition. Vitamin A, 100,000 units intramuscularly, vitamin B complex, containing thiamine hydrochloride 20 mg., nicotinamide 150 mg., riboflavin 4 mg., pantothenic acid 5 mg., pyrodoxine 10 mg., is given twice daily. Sodium ascorbate, 500 mg. daily, is administered intravenously. We have observed beneficial results with neoprontosil (5 grains every six hours for ten days). Sulfonamide therapy in ulcerative colitis has shown variable results. There seems to be little that indicates any effect upon the primary cause of the disease, but probably there is considerable value in the bacteriostatic effect of the sulfonamides on the bacteria in the human as well as on those which secondarily invade the mucosa. In patients who are running a septic course, the use of a soluble sulfonamide, such as sulfadiazine, is indicated in an effort to reach the invading organisms through adequate concentration of the drug in the blood.

In general, the few reports on the use of penicillin in ulcerative colitis have not been encouraging. Streptomycin in our hands has shown little if any improvement, although in a small group of patients aureomycin given orally and chloromycetin have been beneficial. In our experience viodenum is of no avail, except in possibly the very mild afebrile cases. It probably will be found that the antibiotics, like the sulfonamides, have no curative effect upon the colitis, but that in some cases there will be a favorable clinical effect, apparently due to the action upon secondary infection. When sepsis proves to be intractable to medical measures, ileostomy is indicated. In our experience total colectomy should be performed where exacerbations and remissions have occurred. Of twenty-

three patients in whom colectomy was instituted, there were no deaths, and 94.1 per cent were rehabilitated.

Pilonidal Cysts

The diagnosis of pilonidal disease is usually not difficult. Pain and discomfort of varying degree, swellings and mucopurulent discharge with incision and drainage on numerous occasions are usually cited by the patient. Examination discloses one or more openings in the midline or adjacent skin overlying the sacrococcygeal region. An inflammatory process, presenting increased heat, swelling, tenderness, induration, redness and fluctuation, with pus discharging from the opening and perhaps a tuft of hair extending therefrom, leaves little doubt as to the diagnosis.

The treatment is distinctly surgical and consists of the removal of the cyst and all tributary tracts. The relative merit of closing or permitting the resultant wound to heal and fill in by granulation is and always will be a moot question. A survey of over a thousand cases has aided in establishing definite criteria for both the open and the closed methods. Pilonidal cysts and sinuses presenting acute abscess formation and/or multiple tracts and openings and/or definite involvement of the sacrum or the coccyx should be excised in their entirety and left open to granulate in from the bottom. Recurrent cases fall into this category. Conversely, pilonidal cysts and sinuses of small or moderate size, presenting congenital midline openings and devoid of an acute inflammatory process with abscess formation, may be sutured. In the latter, as in all cases, all existing pathologic lesions must be removed, hemostasis must be complete, and all dead spaces must be obliterated. For closure, interrupted sutures of No. 32 alloy steel wire, placed in tier formation, are introduced, but the skin is permitted to remain open. From 1938 to 1948, 230 private cases have been treated by the above criteria. The average period of hospitalization was three and three-fourths days; the average period from the date of operation until complete healing was five and one-half weeks.

Lymphogranuloma Venereum

Probably the most fascinating disease-entity drawn to our attention during the past decade and a half is lymphogranuloma venereum. To us it is of special interest because of the fact that inflammatory stricture of the rectum and esthiomene of the anoperineal and the anovulvar regions are most frequently due to a filterable virus. Stricture of the rectum is an organic narrowing of the lumen of the bowel by fibrous tissue involving the mucous membrane, the submucosa and the muscular coat. It is characterized by progressive constipation, tenesmus and mucopurulent discharge. Rectal manifestations are most common in the female because of the distribution of the lymphatic network. The condition is more frequent between the ages of seventeen and forty, or the period of greatest sexual activity. Also, there is a marked preference for Negroes. It should be borne in mind that the inflammatory process may attack any layer of the rectum or the tissues outside its wall. If from within, the irritation results in erosion of the mucous membrane upon which infection is superimposed. With continuation of the etiologic irritant its inflammatory process becomes subacute and finally chronic in nature, so that the various layers of the rectum and the tissues outside its wall are gradually involved by continuity and contiguity of structure. As a result of this chronic inflammation, much young fibroblastic tissue is deposited in the submucosa as well as in other coats, which gradually leads to thickening of its wall. By subsequent contraction of the maturing fibroblastic tissue, this thickening becomes markedly increased so that there eventually results a firm inelastic narrowing to which the term stricture is applied. A history of constant soiling by feces, blood and pus is suggestive of an inflammatory stricture, especially when cited by a Negress between the ages of twenty and forty. Although the diagnosis by inspection is not absolute, it offers to the careful observer an excellent idea of the pathologic condition present. Not infrequently the region of the anus is moist and glued together by the thick mucopurulent discharge. Hypertrophic skin tags, condylomata of various sizes and one or more fistulous openings are not uncommon. Since approximately all inflammatory strictures of the rectum are within reach of the finger, the diagnosis should not be difficult. Through a narrowed-lumen proctoscope the stricture is identified by its pale leathery and thickened appearance.

In 1925, Frei, of Berlin, introduced a cutaneous test for this disease which has been a distinct diagnostic value in inguinal adenopathies and anorectal syndromes. More recently we have employed the chick embryo antigen (Lygranum) and have found it more specific. Use is made of yolk sacs harnessed

from chick embryos moribund or recently dead from infection with the agent of lymphogranuloma venereum and containing the agent in high concentration free from contamination by other microorganisms or viruses. The technique for testing patients diagnostically is the same for both antigen and antigen control. After preparing the skin of the forearm with alcohol, 0.1 c.c. of each material is inoculated intradermally, and the reaction is read in forty-eight and seventy-two hours. A papule 6 by 6 mm. or greater indicates a positive reaction.

Attempt should be made to build up the constitution of the patient, since there are usually varying degrees of intoxication, weakness and loss of weight. The diet should be nutritious and composed of foods which leave but little residue. Local instillations of icthyol (10 c.c. of a 25 per cent aqueous solution twice daily) are soothing to the mucous membrane. Chemotherapy and antibiotic therapy have diminished the secondary infection but have shown no effect on the organized fibrosis. It has been our experience that resection (proctosigmoidectomy) or excision by the abdominoperineal route is the procedure to be chosen for permanency of cure.

Benign Growths

Adenoma and papilloma of the rectum are common. In our series there were forty-four cases in the young, of which twenty-nine were boys and fifteen were girls. The ages ranged from fourteen months to eleven years. All lesions were located in the rectum or the sigmoid colon. Thirty-six were visualized through the sigmoidoscope and eight by roentgenographic studies, employing opaque enemas followed by inflation with air. In the adult these are usually observed during routine examination, but occasionally patients present themselves because of bleeding. With polypoid growths of large size, pressure or obstructive symptoms are not uncommon. When repeated biopsies show no evidence of malignancy, destruction by fulguration may be instituted; especially is this true in children. Local excision may be employed in selected cases. Polypoid lesions in the sigmoid require transcolonic excision, which has been instituted in sixty-one of our patients.

Malignancy

Cancer of the rectum and the sigmoid represent approximately 80 per cent of all intestinal malignancies. In the male it is second only to that of the stomach. It is difficult to state accurately whether or not cancer is on the increase; certainly today this disease process is being observed with greater frequency. Several reasons may serve to explain this: first, improvements in diagnostic technique and the more widespread use of these methods; and, secondly, patients are transitioned over gaps of intermediate illnesses and therefore reach an age when cancer is more common.

There are no pathognomonic symptoms of rectal or sigmoidal malignancy, but certain complaints are highly suggestive. The passage of blood, bright or dark red in color, occurring at, following or independent of the defecatory act, must be looked upon as a symptom of bowel malignancy until proved to be otherwise by various diagnostic means. Change in bowel habit, progressive constipation, alternate constipation and diarrhea, early morning diarrhea, incompleteness of evacuation, urgency and especially frequent desire for stool are suggestive of this dreaded malady.

Too frequently we prescribe for symptoms without attempting to determine the cause. Rectal and colon symptoms should be as seriously and conscientiously evaluated as those from any other part of the human organism, particularly since the intestinal tract is devoid of sensory innervation.

One must be ever mindful that approximately 78 per cent of cancers involving the anus, the rectum and the sigmoid are within reach of the examining finger. Therefore, following a careful history, digital examination is of utmost importance. By proctosigmoidoscopy, with proper cleansing of the bowel the entire rectum, lower and midsigmoid may be visualized. The presence of a fixed, nodular, cauliflower-like growth, involving the mucosal wall, or a deep excavating ulcer with everted edges will serve to make the diagnosis. A biopsy should be taken for confirmation, but particularly to determine the grade of the tumor. When no lesion is demonstrated by careful digital and sigmoidoscopic examination, a roentgenologic study of the bowel, employing an opaque enema, is invaluable.

If cancer is to be cured, the diagnosis must be made early and radical extirpation must be performed. It is definitely erroneous to assume that a malignant tumor of small size should be eradicated by a conservative operation or that one of large size should be removed by very radical surgery.

The radical one-stage operation (abdominoperi-

(Continued on Page 314)

Fine Nylon Tubes for Feeding in Esophageal Carcinoma

By Harry Kirschbaum, M.D., F.A.C.S.
Detroit, Michigan

IN ESOPHAGEAL CARCINOMA in which the process is so advanced that resection is impossible, metastasis obvious, and gastrostomy of questionable value, the use of a fine nylon tube for continuous feeding suggested itself.

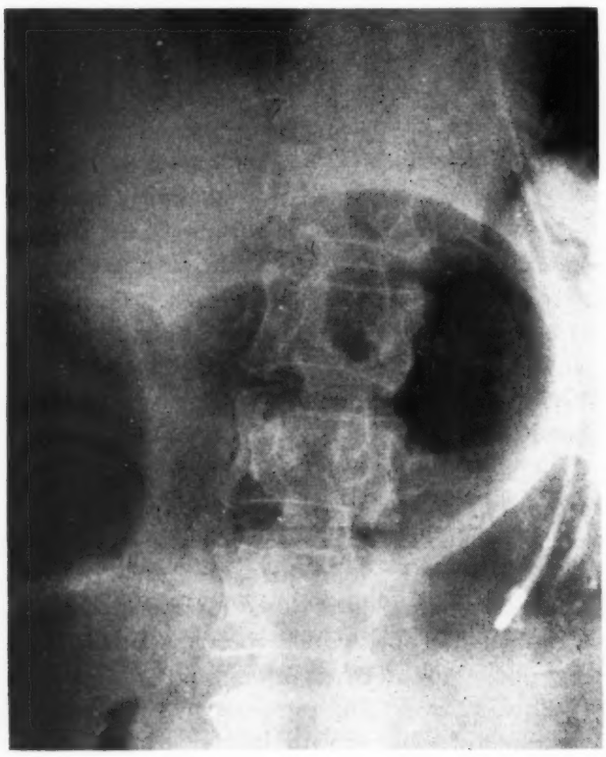

Fig. 1. X-ray with tube in place.

Many patients will be able to swallow semi-solids and liquids almost within two or three weeks before death. It is during this last period that the use of a fine nylon tube was found valuable for continuous feeding rather than subject the patient to a gastrostomy. Since the tube is not irritating, it could be used also to make the patient more comfortable than with continuous use of the Levine tube or Miller Abbott tube.

Use of a fine nylon tube can be of value in:

1. Continuous drip gastric feeding in ulcer or medication in ulcer.
2. Esophageal obstructions and spasm.
3. With fine holes on the sides a fine spray of thrombin could be applied in esophageal varies.
4. In gastric analysis studies, prolonged.
5. In children and infants.

The nylon tube may be marked by five metal markers of different types and to add to its flexibility may have small rubber joints at various lengths along the tubes.

MSMS

DIAGNOSIS AND TREATMENT OF ANORECTAL DISEASES

(Continued from Page 313)

neal resection) advocated by Miles in 1908 is still considered by some the procedure par excellence. It permits wide removal of the gland-bearing area, offers a low recurrence rate and a low mortality. One disadvantage is presented, namely, the establishment of an abdominal colostomy. For this reason alone, innumerable patients jeopardize their lives by refusing what radical operation might offer. The ingenious procedure popularized by Babcock in 1931 permits the same degree of wide excision of the malignant rectum and gland-bearing areas with the formation of a perianal anus in its normal location. By such a procedure an abdominal colostomy is avoided. Approached through the abdomen and the perineum (abdominoperineal proctosigmoidectomy), the cancerous bowel is dissected free, and the vascularized sigmoid is drawn down to the site of the normal anus. With improvements and refinements in technique, preservation of the sphincter has produced excellent results; in fact, in our more recent cases the function may be described as normal. The vast majority of our patients are out of bed on the third day; they are discharged on the tenth; and they return to work in from six to ten weeks. In a series of 470 cases, the mortality rate is well under 5 per cent, and the recurrence rate 17.9 per cent, in spite of a resectability of 87.7 per cent. As to salvage, 52.6 per cent are living and well after five years, whereas if those patients with liver metastases found at the time of resection are excluded, the incidence is 58.4 per cent.

Bilateral Intraocular Metastasis to the Choroid of a Primary Adenocarcinoma of the Cervix

Case Report

By Bernard C. Wildgen, M.D.
Muskegon, Michigan

METASTATIC CARCINOMA of the choroid is relatively rare. Cases having bilateral involvement are considered to comprise 20.8 per cent of the reported series.[2] Approximately 250 cases have been brought to the literature, of which about 160 were histologically proven.[1,3]

In the present case the ocular symptoms were manifest for over two years prior to the discovery of the primary tumor site. This delay occurred despite repeated, diligent and careful studies. The several factors which account for this delay in diagnosis are seen clearly in the review of the course of events, and shall be mentioned subsequently.

Report of Case

F.M.C., a Negro female, thirty-seven years of age, was admitted to Harper Hospital on July 20, 1946, complaining of loss of vision of the left eye for a period of four months; and this was soon followed by frequent left frontal headache. Lid edema became gradually evident during the month prior to admission.

A review of the past history and systems revealed nothing unusual.

It is of note that the patient had been married for thirteen years, had had no pregnancies, and there had been no change in the regularity of the interval and duration of menses.

The family history revealed that her mother had died at the age of forty-five years with "cancer of the womb."

Ocular Examination.—The lids were moderately swollen. The bulbar and palpebral conjunctiva showed chemosis and marked vascular congestion. Corneal edema was extreme. Vision consisted of light perception only. Pupillary reactions were sluggish and a mass could be seen within the fundus. This fundus mass appeared well forward in a position, making visualization with direct light more satisfactory than by use of the opthalmoscope. The surface was undulating and somewhat nodular. Intraocular tension was markedly elevated. The globe was painful on palpation. The right eye showed nothing unusual. The vision was 20/20.

With the exception of obesity, the general physical examination was otherwise not exceptional. Laboratory findings were not abnormal. The blood Kahn test was negative.

The clinical impression was that of intraocular tumor, probably melanosarcoma, with severe secondary glaucoma.

Enucleation, followed by pathological examination, presented the unusual finding of a rapidly growing medullary carcinoma, the cytology of which suggested a primary gastrointestinal site. Almost exclusive choroidal involvment was noted, without retinal, optic nerve or scleral invasion.

Pathological Report.—Gross examination of the tissue section revealed a specimen measuring 22 by 23 mm., having a long nerve section. A mass within the globe 12 mm. in diameter was present. Microscopic study showed a subepithelial pannus. Complete anterior synechia and an atrophic iris with extensive pigment migration into the stroma were present. The vessels of the ciliary body were dilated and the ciliary processes presented loss of epithelium in some areas.

The spaces of Fontana were occluded. The lens had no abnormality of significance. Total separation of the retina was present, the retina being covered by a fibrinous exudate and surrounded by extensive hemorrhage. In the choroid extensive invasion and destruction by a tumor (Figs. 1 and 2) was evident. The tumor cytology was dense and the stromal elements were scanty. Several areas of necrosis were present within the tumor mass. Study of numerous sections of the sclera and optic nerve revealed no evidence of invasion of these structures.

On September 25, 1946, the patient returned for postoperative observation and complained of blurred vision of the remaining eye. The vision was 20/60, correctable to 20/30. The intraocular tension was normal. No significant fundus findings were present. Visual field study revealed a scotoma in the superior nasal quadrant. The patient was instructed to return in a few days for further examination, but this she did not do until February 7, 1947, at which time the ocular situation had markedly changed.

On this occasion vision of 20/400 was present and no improvement was obtained with refraction. The eye was externally quiet. The pupil dilated well with 10 per cent neosynepherine. Funduscopic examination revealed a large, greyish yellow, rounded retinal elevation. This was located in the superior temporal area but extended inferiorly through and below the macular area. The highest elevation was approximately 3 D. The macular reflex was absent and the elevation extended 1 to 1½ disc diameters from the macula superiorly and inferiorly. The margins were indistinct. Atrophic pigmentary changes were present over most of the surface. The intraocular tension was normal.

She was immediately admitted for urgent x-ray therapy as an attempt to preserve vision as long as possible. She received ten deep x-ray treatments to the right eye and orbit. Following this the lesion decreased markedly in size and the vision improved.

On May 1, 1947, she was again admitted to the hospital with the history of sudden pain and complete blindness occurring seven days prior to admission. Examina-

From the Department of Ophthalmology, Harper Hospital, Detroit, Michigan.

Fig. 1. Left eye. Section showing tumor of choroid.

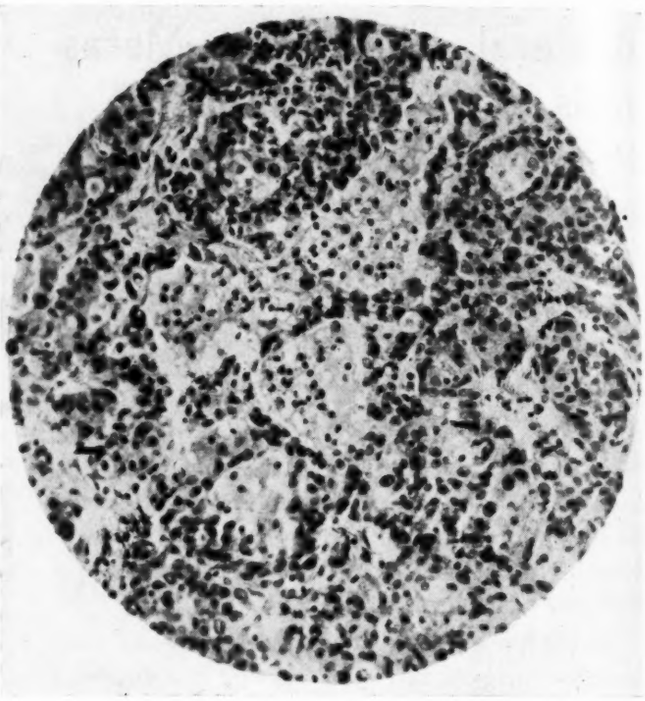

Fig. 2. Left eye. Magnification showing tumor cells of Figure 1.

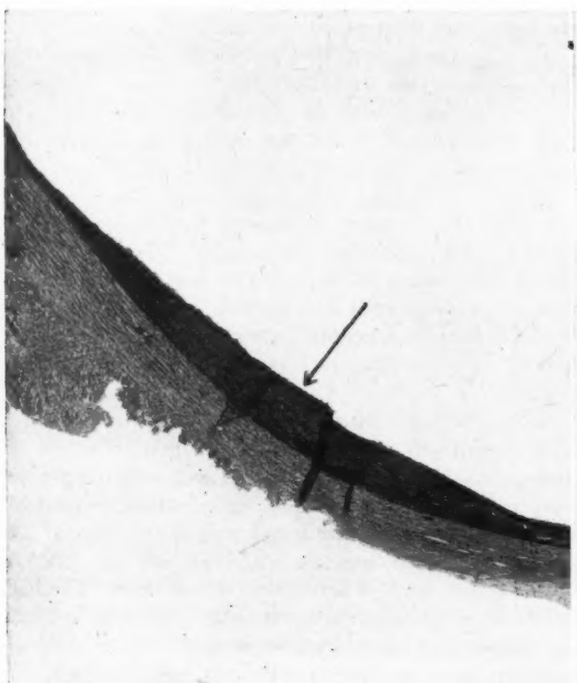

Fig. 3. Right eye. Tumor of choroid illustrated by arrow.

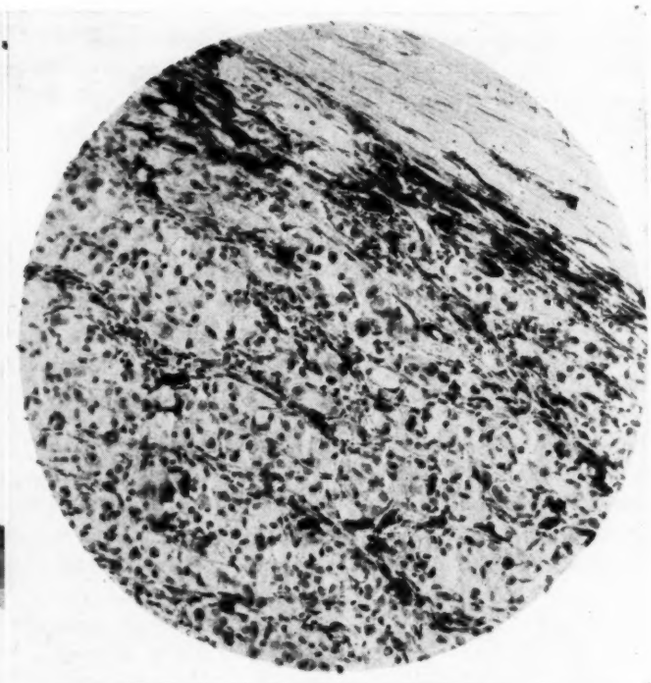

Fig. 4. Right eye. Magnification showing tumor cells of Figure 3.

tion revealed no vision, severe lid and conjunctival edema, corneal edema and a fundus mass of reddish hue. This mass was best seen by direct illumination through the pupil. The globe was quite firm and intensely painful to palpation.

An unsuccessful attempt was made to control the severe secondary glaucoma. On May 3, 1947, the eye was enucleated with the preoperative diagnosis of metastatic intraocular tumor, intraocular hemorrhage and intractable secondary glaucoma.

The postoperative course was uneventful, with primary healing of the operative site.

The gross tissue specimen was 23 mm. in length with an eosin-colored mass in the position of the vitreous. Microscopic inspection showed the corneal epithelium to be thin but showing edema in some areas. Extensive an-

terior synechia blocked the anterior chamber angle, and the iris showed advanced atrophic changes. The lens had evidence of posterior synechia. The ciliary body and processes were atropic and had areas of hemorrhage.

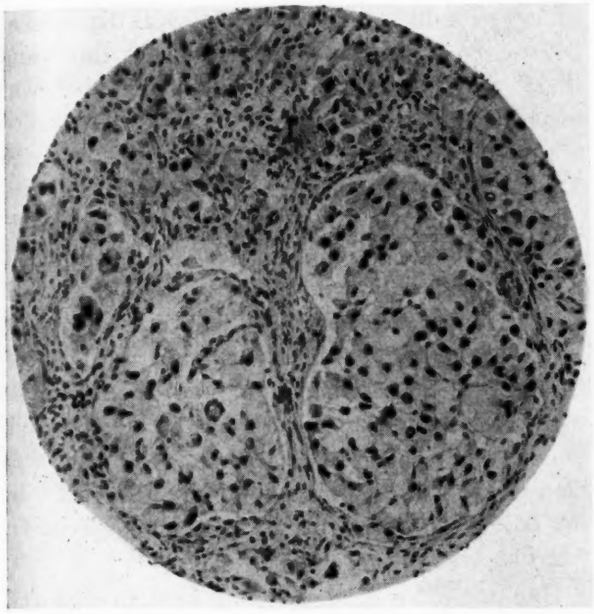

Fig. 5. Magnification showing tumor cells of cervical biopsy.

Within the vitreous space there was a large hemorrhage. Proximal to the nerve head, in the choroidal area, a mass 6 mm. in length and 2½ mm. in thickness was present (Figs. 3 and 4). The tumor consisted of densely packed groups of cells, which were large and round. The nuclei stained deeply. A moderate amount of stroma was present, and this contained scattered pigment-bearing cells. Inspection of the sclera and optic nerve gave no evidence of invasion of these structures.

Repeated surveys were done throughout the course of observation of this patient to determine the primary source of the tumor. During October, 1947, the patient was to have been admitted to the hospital for biopsy of an indurated mass which surrounded the urethral canal. As in previous instances the patient unfortunately chose to avoid this event.

On May 13, 1948, she was admitted to another hospital of this city with the clinical history of a recent 30-pound weight loss. Dysuria, consisting of nocturia and difficulty initiating the urinary stream, had been present several months. Menstrual periods had been regular in interval, duration and volume. Pelvic examination revealed the cervix to be red, hypertrophied and the anterior lip eroded. The fundus of the uterus was then palpable and was enlarged to the size of a three months' pregnancy. The surface was irregular and firm. The right adnexa was negative, but in the left adnexa a sense of resistance and some tenderness was present.

Roentgenological study revealed congestive changes of the lungs, a non-specific duodenitis and osteoblastosis of the dorsal spine segments. The latter was considered confirmatory evidence of metastasis. It is of note that previous examinations done eight months before were negative in this regard.

On May 20, 1948, biopsy of the cervix was done and specimen study revealed adenocarcinoma, Grade IV. This biopsy was later repeated at another hospital. (June 17, 1948), and the independent diagnosis of adenocarcinoma of the cervix was made (Fig. 5). The condition of the patient became rapidly worse until she expired August 27, 1948. Unfortunately autopsy permission was not granted.

Summary

A case of bilateral metastasis to the choroid from a primary adenocarcinoma of the cervix has been presented. The infrequency of such cases has been mentioned. Factors which tended to make the search for the primary tumor difficult consisted of the obesity of the patient, which hampered satisfactory palpation of the uterus size; the consistently negative gynecological history, and the patient's erratic appearance for observation.

References

1. Bedell, A. J.: Bilateral metastatic carcinoma of the choroid. Arch. Ophth., 30:25, (July) 1943.
2. Duke-Elder, vol. 3, p. 2523.
3. Lemoine, A. N., and McLeod: Bilateral metastatic carcinoma of the choroid. Arch. Ophth., 16:804, (Nov.) 1936.

MSMS

CANADA AND THE UNITED STATES BLITZ COMMON FOE: MOSQUITOES

A combined airborne operation against an airborne foe has just been carried out jointly by defense agencies of Canada and the United States as scientists of the two countries leveled their deadliest insecticides against the arctic mosquito.

Airplanes operating in the Hudson Bay area sprayed wide swaths of enemy breeding territory, killing off the pestiferous little insects by the millions. The joint operation, organized to test the effectiveness of various insecticides in making the north country habitable for troops in the field, proved that DDT and parathion do an effective job in killing off the larvae.

Although DDT was used principally, parathion proved highly effective at even lighter dosages. Parathion, the U. S. Bureau of Entomology and Plant Quarantine explains, is so deadly a poison that it has not been recommended for general use by the public.—*Science News Letter*, December 24, 1949

Exfoliative Cytology in Periodical Physical Examination

By Nelson Taylor, M.D., and
Donald G. Ross, M.D.
Grosse Pointe, Michigan

DOCTOR George Papanicolaou, professor of clinical anatomy at Cornell University Medical College, first reported the detection of cancer cells in vaginal smears in 1928[14] and later used a method of vaginal smears in determining estrogenic response. However, in 1942[15] he again reported a procedure for recognition of malignant cells and then in 1943 collaborated with Traut[16] on the atlas, "Diagnosis of Uterine Cancer by Vaginal Smear." Subsequent articles[17,18] have amplified this initial work. Historically it must be recorded, however, that in 1864 Sanders[20] reported the diagnosis of tumor of the bladder on the basis of urinary sediment examination.

The cytologic test for cancer has received widest application in the study of vaginal smears by various observers with varying degrees of reported accuracy and satisfaction with the method. Wiles and Hellwig[24] feel that clinical pathologists should afford the procedure a trial, formulate its advantages and limitations and establish its place in the diagnosis of cancer. In their hands there was 80 per cent correlation. They emphasized that it was not possible to differentiate between changes due to irradiation, carcinoma *in situ* and invasive carcinoma. Thus tissue diagnosis should not be replaced by smears. They also point out that the trichrome stain of Papanicolaou is not specific for malignant cells but the advantage is in the light staining of the cytoplasm.

Lombard, Middleton, Warren and Gates[10] of the Massachusetts Department of Health supervised the examination of 6,265 subjects and concluded that by exfoliative cytology it may be possible to find one uterine cancer among 200 to 500 women free from symptoms. They further state "the technique is more likely to lower cancer mortality because it has made a larger number of physicians aware of the insignificance of the signs and symptoms that may be associated with early carcinoma of the uterus than because of the number of early cases it discloses."

Scheffey, Rokoff and Hoffman[21] reported the examination of 500 consecutive cases in which uniform techniques by the same observers (pathologist and cytologist) were employed. There was correct correlation between smear and tissue biopsy in 94.8 per cent. However, their greatest error was in the false negatives.

Chung[3] reports on vaginal smears from a total of 566 patients seen in a gynecological department, 542 without previous diagnosis. In this group there were twenty-three reported positive with seven false positives and one known false negative.

Fremont-Smith, Graham and Meigs[5,6] review 3,710 cases studied in five years at Vincent Memorial Hospital supplementing an earlier report.[13] In 3,327 patients without cancer a mistaken positive diagnosis was made in 55, 1.6 per cent. Their total diagnostic error was 2.8 per cent. This same group comments that many patients may have carcinoma of the cervix for as long as eight years with neither symptoms nor signs. They conclude that the smear is frequently more accurate than biopsy. Jones, Neustaeder and MacKenzie[9] are similarly enthusiastic in their acceptance of exfoliative cytology.

Hauptmann[7] reports that ninety carcinomas were studied cytologically, and correlation was found in eighty-six. The four false negatives were all smears obtained from ulcerating malignant breast lesions (similar to one false negative in our series). False positives were found in five of 178 controls presumed not to have cancer.

Shushan[22] accumulated the experience of several groups totaling 5,329 cases. False positives averaged 0.7 per cent, false negatives 0.8 per cent with an over-all range from 0.3 per cent to 4 per cent.

For supplemental information in periodic examinations the vaginal smear is of value in estimating estrogenic activity. MacKenzie[12] and colleagues reported that in seventy-six patients the vaginal smear agreed with the clinical diagnosis 82 per cent of the time with both natural and surgical menopause. Regardless of the etiology of the menopause, 35 per cent of the smears showed atrophy within eighteen months and 60 per cent showed atrophy after this time. The authors found, using Papanicolaou's criteria, an 84 per cent agreement between the known phase of the menstrual cycle and a single vaginal smear. The vaginal smear correlated with the endometrial biopsy 89 per cent of the time. The vaginal smear was found of value in determining the prognosis in secondary amenorrhea since there was very little success in the treatment of patients with definite atrophic changes.

In correlating vaginal smears and tissue diagnosis Ayre suggests the use of a cervical cone knife in order to obtain precision biopsy of the squamo-columnar junction when positive vaginal smears have been reported.[4]

Male urethral smears have not been investigated from the standpoint of malignancy, but such investigations as those of Vogel, McGavach and Kammendel [23] have indicated certain advantages. They studied males of all ages, but in the group from eighteen to thirty-two years there was a somewhat higher degree of cornification and acidophilism than in those younger and older. Maximum values for 17-ketosteroids have also been reported in this age group by Barnet and colleagues.[2]

Albers, McDonald and Thompson[1] in a well-documented report state, "Cancer of the prostate accounts for 8000 deaths each year in the United States. Well-advanced carcinoma can be found by the examining finger, but the procedure of rectal examination of the prostate is totally inadequate for early malignancy arising in the anterior or lateral lobes." They concluded that carcinoma cells can be found in the prostatic fluid and identified with a high degree of accuracy. The chief difficulty is in recognizing malignant cells that are well differentiated (Grade I).

Increasingly more emphasis has been placed on the importance of early carcinomas which have not broken out of the parent epithelium to invade surrounding tissue and therefore are known as carcinoma *in situ*. This designation currently is applied to such well-recognized lesions in the breast, cervix and stomach. It is also believed to apply to Bowen's precancerous dermatosis of the skin and to exactly similar lesions in the esophagus and anus.

Foot and Papanicolaou[4] report the discovery of blood in ureteral catheterized urine in which repeated specimens indicated the presence of malignancy. Nephrectomy verified the diagnosis of carcinoma *in situ* involving many collecting tubules on microscopic but not macroscopic examination.

Woolner and McDonald[25] reported on the cytological examination of the sputum from 2,188 patients and analyzed 200 cases in which a diagnosis of carcinoma was made. In 190 cases a final diagnosis of bronchogenic carcinoma or pulmonary metastatic carcinoma was established. In four cases a carcinoma in the esophagus, larynx or trachea was demonstrated. In four other cases the diagnosis was proved to be falsely positive. In the remaining two cases the final diagnosis was uncertain. Exfoliated carcinoma cells in sputum or bronchial secretions provided the only preoperative microscopic evidence of cancer in twenty-nine of seventy-four cases of bronchogenic carcinoma in which surgical exploration was carried out. In thirteen cases in which the lesion proved removable a preoperative diagnosis of cancer was based on the cytological characteristics of sputum or bronchial secretion. They conclude that "cytologic examination of sputum is of great diagnostic value in the case of patients suspected of having bronchogenic carcinoma and in whom bronchoscopic examination is contraindicated."

McCandless and Faloon[11] present a case of bronchogenic carcinoma with metastasis diagnosed by cytological examination of the pericardial fluid. The diagnosis was confirmed by sputum examination. They note that antemortem diagnoses have been similarly made in ten other cases on the basis of pericardial fluid.

Pollard and his co-workers studied the cytology in 326 gastric aspirations on 278 patients. There were 86 per cent negative reports and 14 per cent indefinite or falsely positive. In forty-one cases of proved gastric neoplasm 65 per cent were indefinite or negative. Despite this rather wide disagreement they state that the method has sufficient merit to warrant further trial. However, false positive reports occur sufficiently often to render it inadvisable to plan therapy on the basis of gastric cytologic study alone. Conversely, they felt that a report of malignant cells in the fasting gastric contents is an indication for exhaustive study to rule out gastric carcinoma.

Technique

Vaginal Smears.—A slightly curved, blunt end glass pipet, 6 inches long and 0.5 cm. in diameter, has a 3-inch rubber suction bulb attached. (Frequently narrower gauge pipets are of assistance when there is a scarcity of vaginal excretion). The glass pipet may be introduced directly into the posterior fornix of the vagina without a speculum in large screening series. There appears, however, to be some advantage to the use of a speculum with minimal or no lubricant. The pipet is then introduced into the cervix without undue pressure meanwhile pressing and releasing the rubber bulb. The material thus collected is blown onto a glass slide and spread thinly and evenly over two-thirds of the slide. The process is repeated using only vaginal excretion for the second slide. The slides are

immediately placed, smeared end down, into a wide mouthed bottle containing equal parts of 95 per cent alcohol and ether. Fixation requires at least five minutes, but slides may be left in the solution for periods of two weeks. The patient then takes the bottle to the laboratory where the slides are stained with Papanicolaou's trichrome stain and interpreted by a pathologist.

Gastric Specimen.—Gastric specimens are obtained directly through the gastric lavage tube from the fasting stomach and placed on slides and fixed as above. The method used by Pollard[19] consisted in placing fasting gastric aspiration material in 95 per cent alcohol and then centrifugation. The sediment was then smeared and fixed.

Urine Specimens.—Samples of urine sediment may be spread evenly on the slide as in spreading a blood smear with the end of another slide.

Prostatic Fluid.—Prostatic fluid may be spread upon a slide unless the material is too thin. In this case it should be centrifuged or mixed with a small quantity of egg albumin.

Accessible Ulcerating Lesions.—Accessible ulcerating lesions may be rubbed cautiously with the gloved finger which is then streaked on the slide. Some investigators[8] take a small section of tissue, tease it with two needles on a slide where is placed a drop of human serum and then transfer a portion of this to two cover slips and spread as with a blood smear.

Sputum.—Sputum may be spread directly onto the slide with caution to avoid a thick smear.

Material

The vaginal and prostatic exfoliative cytologic slides reported in our series were all obtained from private patients in the course of complete physical examinations. Some were annual examinations and others done for complaints referrable to other systems than the genital tract. The study was begun in June, 1948, and terminated in February, 1949. Routine prostatic smears were taken only during the last three months of the study. The series includes 182 smears on 169 patients.

Results

Vaginal smears accounted for the majority of the examinations. In a group of 115 cases with 124 smears there were five positive for malignancy and three questionable reports. In a supplemental group of eighteen reports to other physicians from the same laboratory there were fourteen negative and four questionable. Two of these latter were repeated and found to be negative.

TABLE I

	Neg.	?	Pos.	Pts.	Total Smear
Sputum	1			1	1
Mouth		1	1	1	2
Gastric	2			2	2
Breast	1			1	1
Urine	2		1	3	3
Ascites			1	1	1
Prostate	26	1		27	28
Vaginal	121	7	5	133	144
Total	153	8	8	169	182

TABLE II. POSITIVE VAGINAL SMEARS

1 hysterectomy elsewhere: no malignancy reported (serial sections not run)
2 curettages elsewhere: no malignancy reported (1 received "routine" radium)
1 (80-year-old) advised by roentgenologist (elsewhere) no therapy
1 hysterectomy at Bon Secours=epidermoid carcinoma confirmed

In the group of five reported positive for malignancy, one patient had a hysterectomy at another hospital where the diagnosis was not confirmed. Serial sections of the excised tissue were not run. Two patients had curettages elsewhere without confirmation; one received "routine" radium implantation despite this fact. One eighty-year-old patient was advised by a radiologist elsewhere not to have any therapy. One sixty-one-year-old patient with a smear positive for epidermoid carcinoma was operated at Bon Secours Hospital. There were no gross lesions visible but at curettage a small irregularity was noted in the fundus. However, when hysterectomy* was done this papilloma was found to be benign, but serial sections of the cervix disclosed carcinoma *in situ*.

TABLE III. OTHER POSITIVE SMEARS

1 urine: prostatectomy confirmed adenocarcinoma
1 mouth: biopsy confirmed epidermoid carcinoma
1 ascites: operation confirmed ovarian cystadenocarcinoma

In this series there was only one sputum examination which was negative. One patient had an ulcerating epidermoid carcinoma of the sublingual area proved by biopsy, and smear of this was positive. Two patients had cytologic examinations of gastric contents both reportedly negative. One of these two patients, a fifty-two-year-old man, died of generalized neoplasm, but unfortunately autopsy was not permitted to determine whether the stom-

*Dr. Ira G. Downer.

ach was involved. One patient had a very large ulcerating medullary carcinoma of the breast, and a smear from this was reported negative.

TABLE IV. FALSE NEGATIVES

1 breast:	advanced ulcerating medullary carcinoma
	Possible False Negative
1 gastric:	patient died, generalized neoplasm, autopsy refused

Three patients had cytologic studies of urinary sediment with two negatives. The third was a sixty-five-year-old man with prostatic obstruction presumed to be benign because of the large size and regular conformation of the gland. The Papanicolaou test was reported positive for malignancy, and this was confirmed at operation where adenocarcinoma was found.

Prostatic smears were obtained from twenty-seven men, one of which was reported questionably malignant in a twenty-eight-year-old patient. Repeat smears were negative.

One patient of another physician† had a negative vaginal smear but the ascitic fluid was reported positive for malignant cells. At operation she was found to have a cystadenocarcinoma of the ovary.

Discussion

The chief hazard in this test appears to be the possibility of false positive reports. From the data available these appear to be considerably more frequent than false negatives with the possible exception of advanced neoplasm where the diagnosis is obvious. For some unexplained reason it is often difficult to obtain characteristic cells from such lesions. However, it is imperative that every possible means of obtaining confirmation of exfoliative cytologic studies be employed, using all other means available before definitive therapy is instituted.

An incidental problem is exemplified in the behavior of four of the five patients with positive vaginal smears reported in this series. None had symptoms referrable to the pelvis at time of examination. Therefore, all were understandably disturbed when advised as tactfully as possible of the implications of the test. Nevertheless, the four patients went elsewhere for further observation.

The limitations of the test must be explained to the patient (see explanatory form). Yet the simplicity of the test, its inexpensiveness without hospitalization, lack of discomfort to the patient, ease with which observation may be repeated and its increasing accuracy in the hands of trained observers recommend it for routine use in periodic physical examinations.

Explanatory Note to All Patients

The exfoliative cytology (Papanicolaou) examination is a *screening* test for cancer of *one particular* part. While the accuracy of interpretation is constantly increasing, it is still not 100 per cent. Occasionally there are technical reasons for repeating the test.

In some quarters it has been deplored that patients derive a false sense of security from a negative Papanicolaou report. However, the propaganda for cancer detection has recently become so intense that we have literally scared the "unmentionables" off our patients. Now if we are able to permit the great majority of them to replace their apparel with equanimity and assurance after negative reports then a double purpose may be served.

It will undoubtedly take many years to fully evaluate this procedure, but this small study raises at least two additional questions: (1) Do visible lesions increase the percentage of false negatives? (2) What will eventuate in those patients with consistently positive exfoliative cytologic smears who refuse definitive therapy?

Conclusions

1. In 169 patients 182 exfoliative cytologic smears were examined.
2. There were four confirmed positives in eight consistently positive smears.
3. The other four patients went elsewhere for further observation.
4. The limitations of the test should be explained to each patient.
5. The simplicity of exfoliative cytology and its increasing accuracy recommend it as a routine screening procedure in periodic physical examinations.
6. Final evaluation of the method must await years of continued observation.

References

1. Albers, D. D.; McDonald, J. R., and Thompson, G. J.: Carcinoma cells in prostatic secretion. J.A.M.A., 139:299, (Jan. 29) 1949.
2. Barnet, J.; Henley, A. A.; Morris, C. J. O. R., and Warren, E. L.: Polarographic estimation of steroid hormones; comparison of normal values for urinary 17 ketosteroid by polarographic and colorimetric methods. Biochem. J., 40:778, 1946.
3. Chung, Joseph: Uterine carcinoma. Quart. Bull., Northwestern Univ. M. School, 23:33, 1949.

(Continued on Page 340)

†Dr. Carl Swanson.

Dysgerminoma of the Ovary

Report of a Case

By W. C. Huyser, M.D.

Kalamazoo, Michigan

THIS TUMOR has a counterpart in the testis where it was first described. The early writers were of the opinion that the testicular tumor had its origin from cells of the seminiferous tubules. Chevassu, in 1906, was the first to apply the term "seminoma" to testicular tumors arising from such cells and to point out that similar cells were found in only one other type of tumor, viz., ovarian tumors. Chenot, in 1911, was the first to establish the existence of seminoma of the ovary. The tumor is rare, and it is estimated that it comprises about 3 per cent of all primary malignant ovarian neoplasms.

The histogenesis of dysgerminoma is still unsettled but the view generally accepted is that of Meyer, who attributed its origin from cells of the early germinal epithelium which failed to acquire sex potential and were therefore incapable of sex direction. The cells were "disgerminal"; hence the name "disgerminoma," suggested by Meyer. He explained that the tubular formations in the testicular homologue represented secondary invasion of the seminal tubules by the neoplasm. Other terms applied to this tumor were carcinoma puellarum, embryonal carcinoma, teratoid carcinoma and alveolar sarcoma.

Since the tumor originates from undifferentiated sex cells, it is void of specific hormonal influence and will therefore neither masculinize nor feminize the individual. Thus, while it is found in hermaphrodites and is a common tumor of pseudohermaphrodites or those with poorly developed sex glands, it has no role in the hermaphroditism which is usually of the congenital or chromosomal type (Novak and Gray). More than one-half of the cases occur in women otherwise normal, and some have borne children before or after the operation for the removal of the tumors.

The growth is one of childhood and early adulthood, differing in this respect from its homologue, the testicular seminoma, which rarely occurs before the age of thirty. Most of the cases (thirteen out of seventeen in the series of Novak and Gray) occurred in the second and third decades. Age limits from reported cases are four and fifty-seven.

The right ovary is more often involved (48 per cent) than the left (26 per cent) (Seegar). In about 25 per cent of the cases there is bilateral involvement. The uninvolved ovary may be normal, aplastic, rudimentary, or absent. The size of the tumor varies from a few centimeters in diameter to one that almost fills the abdominal cavity. Growth is usually rapid and it may attain great size in a period from three to six months. Grossly it is covered by a thick dense capsule and the contour is usually lobulated. Its consistency is described as "rubbery." The cut surface is uniform, grayish in color, with areas of yellowish hue indicating lipoid degeneration. Areas of hemorrhage and necrosis are common.

The microscopic appearance is one of large round tumor cells with hyperchromatic, centrally placed nuclei containing large nucleoli and granular cytoplasm. There are frequent mitotic figures. The cells have an alveolar arrangement separated by connective tissue characteristically infiltrated by lymphocytes. Occasionally giant cells are present. The histologic diagnosis is that of Grade 4 (Broders' classification) embryonal carcinoma with lymphoid stroma (Moreton-Desjardins).

The most common sites of spread are to the uterus, other pelvic organs, peritoneum and omentum. Metastasis to other organs is not common. Involvement of the lumbo-aortic and left supraclavicular lymph glands has been reported. Metastasis by way of the blood stream is rare. Distant metastasis may be absent even when the tumor has attained a large size.

The dysgerminoma has no influence on sex characteristics and neither male nor female sex hormones have ever been demonstrated in the tumor itself or in the body fluids of the patient. Cases are reported in which anterior pituitary-like substances have been increased to the point where the Friedman and Ascheim-Zondek tests on the urine were positive. In four such cases recently reported the tests became negative after treatment of the tumors. In most of the cases the Friedman test is negative.

The clinical picture of dysgerminoma is not sufficiently characteristic to be diagnostic, although a rapidly growing, firm, sensitive, lobulated abdominal tumor in a girl in young adulthood, with a negative Friedman and an x-ray showing soft tissue tumor, is suggestive. Surgical exploration is justi-

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fied as microcopical examination is necessary for diagnosis.

Novak and Gray have divided the cases from a clinical standpoint into three groups: (1) those in which the tumor capsule is intact, with no extension beyond the ovary; (2) those in which there is infiltration, at times massive, of other pelvic viscera, such as the uterine ligaments, tubes, bladder, or the pelvic peritoneum; (3) those in which extensive metastasis is seen, usually to the omentum, parietal peritoneum, lymph glands, liver or other organs.

In the first group unilateral operations are recommended where one ovary is involved. This would conserve the reproductive function if the other ovary were normal. It has been noted that involvement of the remaining ovary occurs in about one-third of the cases. Frequent follow-up examinations are required. Metastasis may become evident which could not be detected at the time of the operation.

In all other cases radical operation is advised. While the tumor is histologically malignant, the clinical course varies greatly in individual cases. Cases are on record where the patient has lived in comparative comfort for several years where only an incomplete operation had been possible. The over-all mortality rate has been suggested by Seegar at between 36 to 60 per cent, with slightly higher rate of recurrence and metastasis.

Treatment by x-ray has been quite generally used although the opinions of authors differ on the radiosensitivity of the tumor. Moreton and Desjardins of the Mayo Clinic consider the tumor radiosensitive second only to lymphoblastoma. Because of the probability of wide and often early metastasis, radiation is given over the entire abdomen and the left supraclavicular region in all cases, using a current of low potential to avoid excessive damage to normal structures. The treatments are repeated in a month; subsequent courses depend upon follow-up examinations.

Case Report

T.P.,* a girl, white, aged sixteen, complained of a painful enlargement of the abdomen. She first noticed a "bunch" about two months before, and enlargement has been rapid since, especially the last two weeks. Her abdomen felt sensitive, but for three days prior to the operation (ten days hence) she had several attacks of severe sharp pain which radiated to her right shoulder and caused her to feel faint. Her first menstrual period occurred two months before and lasted five days. She flowed again twenty-eight days later, this time six days. Periods were normal so far as her mother could judge.

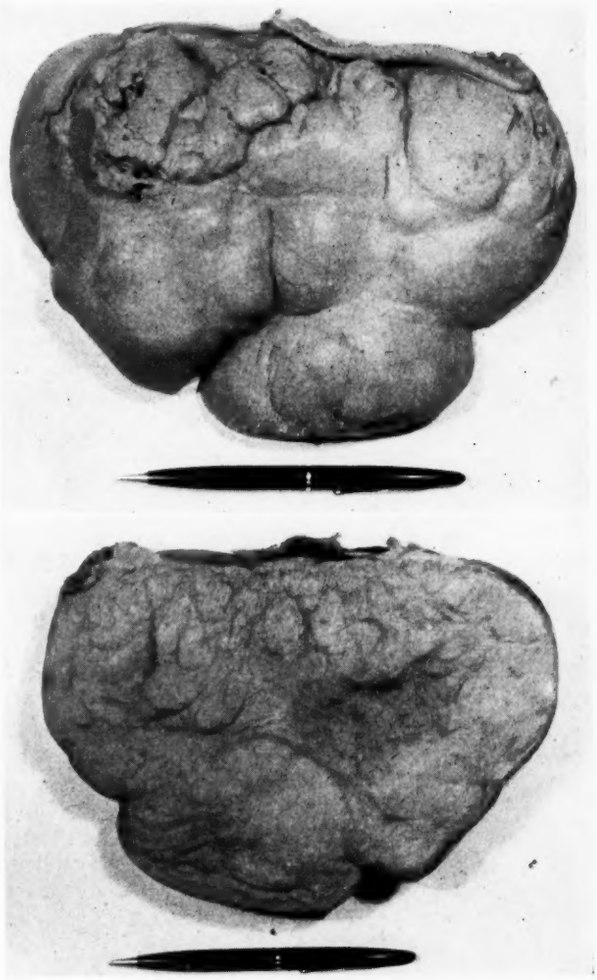

Fig. 1. Photograph of dysgerminoma of the ovary with cross section showing lobulation and extensive necrosis. Size 24 by 17 by 11 cm.

Past History.—Except for childhood diseases the patient had never been ill.

Family History.—Parents were living and well. Five brothers and three sisters were living and well. None were dead.

Examination.—Abdomen was enlarged by a tumor which extended to the level of the umbilicus on the left and to about 3x above the umbilicus on the right. The uneven upper border gave an impression of lobulation. The tumor was firm, smooth and sensitive to palpation. A small-pear-shaped mass was felt on the anterior surface of the tumor just above the pubis. The labia were normal, the clitoris was not enlarged, and the introitus was virginal. On rectal examination no pelvic structures were palpable. There was no pubic or axillary hair. The breasts were small, rounded and firm. The x-ray shadow was that of a soft tissue tumor, and the Friedman test was negative.

*Patient of Dr. W. R. Vaughan, Plainwell.

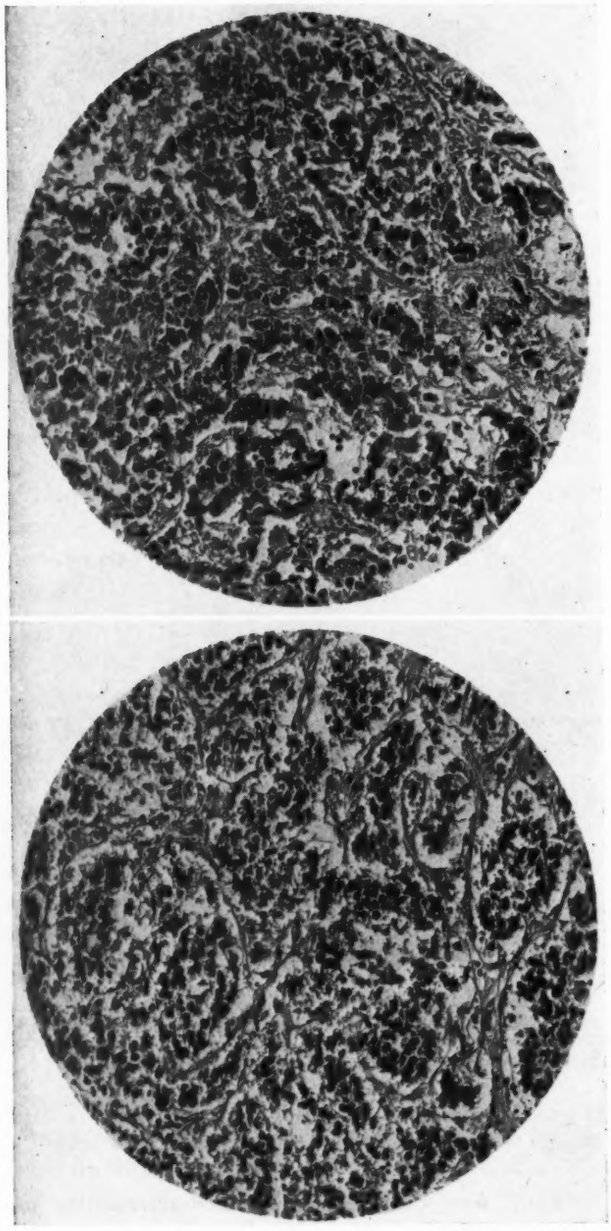

Fig. 2. Photomicrographs show alveolar arrangement of large polyhedral cells with hyperchromatic nuclei. Degeneration obscures histological detail.

Operation, October 30, 1947.—There was a small amount of straw-colored peritoneal fluid. A large, lobulated tumor, pinkish-gray in color, springing from the right ovary, lay entirely within the peritoneal cavity. There were no adhesions. The right tube, long and edematous, was stretched across the surface of the tumor. The uterus, somewhat elongated, was drawn out of the pelvis and lay on the anterior surface of the tumor. The left tube was normal. The left ovary was small, flat, with a dull bluish-gray color. Right salpingo-oöphorectomy was done. Further exploration of the pelvis and abdomen was negative. The postoperative course was uneventful. Her third menstrual period due at this time occurred during the postoperative period, lasted five days, and was normal.

Pathological report by Dr. A. De Groat, pathologist, Borgess Hospital. Gross examination: The specimen consists of an oval, coarsely lobulated tumor, weighing roughly three kilograms and measuring 24 by 17 by 11 cm. Cut surfaces are firm, rather slippery, and yellowish, giving an "encephaloid" appearance. The tissue is divided into small and large lobules by white fibrous septa. Attached is an elongated but otherwise normal fallopian tube, which measures 11 by 1.0 cm. This is stretched across the mass close to the pedicle.

Microscopic examination: The tumor is made up of solid masses of round and polyhedral cells with moderately large, hyperchromatic, vesicular nuclei. Nucleoli are not conspicuous. No adenomatous or papillary structures are found. Degenerative changes are marked and the cytoplasm, which is abundant and clear where cells are intact, tends to disappear, leaving bare nuclei. A few areas show lymphocytic infiltration of the stroma. In wide areas the stroma is empty. No normal ovarian tissue is detected.

Diagnosis: Dysgerminoma of the ovary.

Subsequent Course.—Follow-up examinations have been made every three months. No x-ray treatments were given in order to conserve possible function in the left ovary. Following the operation there were three normal menstrual periods at twenty-eight-day intervals and lasting five days. There has been no menstruation since. At the time of the last examination (September 15, 1949) no evidence of metastasis could be found. On recto-abdominal palpation the uterus was small, hard and freely movable. No other structures or masses were felt in the pelvis. The patient has gained in weight, feels well, is ambitious and enjoys her work as a clerk.

Summary

1. A few points from the literature on dysgerminoma are recorded.

2. A case of dysgerminoma in a girl of sixteen, involving the right ovary with a rudimentary left ovary, is reported.

3. That this patient is well and free from metastasis at the end of two years lends support to those who advocate conservative surgery for this type of the disease.

References

1. Barzilai, Gemma: Atlas of Ovarian Tumors. New York: Brune and Stratton, 1943.
2. Béclère, Antonie: Seminoma of the testicle and seminoma of the ovary. La presse med., 42:1513, (Sept. 29) 1934. (Translated abstract).
3. Block, Frank, W.: Ovarian tumors. Am. J. Sc., 212:738, (Dec.) 1946.
4. Burge, Edward, S.: Dysgerminoma ovarii. Am. J. Obst. & Gynec., 57:1015, (May) 1949.
5. Klaften, H.: Further contribution to the clinics of dysgerminoma of the ovary (Robert Meyer). Archiv für Gynakologie, 158:544, 1934. (Translated abstract).
6. Meyer, R.: The pathology of some special ovarian tumors and their relation to sex characteristics. Am. J. Obst. & Gynec., 22:697, 1931.
7. Moreton, Tobert D., and Desjardins, Arthur, V.: Dysgerminoma of the ovary. Am. J. Roentgenol., 57:84, 1947.
8. Novak, Emil, and Gray, Laman, A.: Dysgerminoma of the ovary. Clinical and pathological study of seventeen cases. Am. J. Obst. & Gynec., 35:925, (June) 1938.
9. Seegar, G. E.: Ovarian dysgerminoma. Arch. Surg., 37:697, 1938.

Management of Disease of the Biliary Tract

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WHEN one considers that "15 per cent of people in the United States suffer from biliary disease and this figure increases to 30 per cent among individuals beyond forty-five years of age,"[9] the enormity of the problem of disease of the biliary tract can be seen. Of course, these are not all surgical patients, and with proper care a large proportion of them may be spared operation. The surgeon is called in to see the complications. These usually occur in the weakest links of the biliary chain. Considering the liver, hepatic ducts, gall bladder and common duct as links in this chain, the surgical problems are mainly in the gall bladder and common duct. While the disease process may manifest itself in one or more of these links, it must be remembered that it is not confined to that link but involves the entire biliary system.

Experimental work as to the probable causes of cholecystitis have given us rational basis for medical and surgical treatment. Doubilet and Mulholland,[8] by operative cholangiography in man and by the demonstration of pancreatic juice in the gall bladder and common duct, have shown that a common passageway between bile and pancreatic ducts frequently exists. Thus, reflux of bile into the pancreatic ducts and pancreatic juice into the biliary tract is possible. That pancreatic juice can cause cholecystitis in man has been proved.[10] Numerous experiments in which the cystic duct is ligated and the gall bladder allowed to concentrate its own bile, or in which concentrated solutions of bile salts have been placed in the gall bladder, have all shown the ability of concentrated bile salts to produce cholecystitis. Womack[17] says that the inflammation produced seems to be almost in direct proportion to the concentration of the bile. Cole,[5] working with dogs, produces flaps causing obstruction of the cystic duct. In every instance when a definite obstruction of the cystic duct was produced, a severe grade of chronic cholecystitis consisting of fibrosis, lymphocytic infiltration, et cetera, similar or identical to that seen in human beings, was produced. Maximum effects are not noted until at least two years have elapsed since production of the obstruction. Gallstones were produced on two occasions.

Stasis and infection is the combination which Andresen[1] believes to cause gall-bladder disease. Cole,[5] however, found that in only 30 per cent of cases of experimentally produced cholecystitis was culture of the gall-bladder wall and bile positive. Gatch[10] feels that infection is seldom a primary cause of cholecystitis but that it is not unimportant as a secondary factor.

Metabolic changes may also be a factor in cholecystic disease such as the cholesterol elevation in hypothyroidism and pregnancy. Robertson[14] concluded that pregnancy was not a factor. A study of the postmortem records at the Mayo Clinic showed that 83 per cent of the women with gallstones had had pregnancies and that 79.9 per cent of the women having gallstones at operation had had pregnancies. Since 20 per cent of the women in the United States have no children, there appears to be no increase in gallstones in parous women.

To this list of causes of cholecystic disease, Rehfuss[13] adds allergy. While this may be an added factor in some cases, it is our opinion an uncommon finding.

Thus, we have so far considered as causes of biliary tract disease:

1. Pancreatic regurgitation.
2. Concentrated bile.
3. Stasis.
4. Infection.
5. Metabolism.
6. Allergy.

With these causative factors in mind, treatment can be put on a rational basis. This includes prophylactic as well as therapeutic measures. For the purpose of treatment the first three of the causes may be considered together. Stasis occurs due to lack of stimulation of the emptying function of the gall bladder or due to an obstruction. When stasis is present, the bile becomes concentrated in the gall bladder by the ability of the gall bladder to absorb water from its contents. When stasis is caused by an obstructing mechanism, whether stone, inflammation or spasm of the sphincter of Oddi, and if this occurs distal to the junction of the pancreatic and bile ducts, then regurgitation of pancreatic fluid into the biliary tree may occur. If the obstruction is complete, operation is indicated early. Much can be gained where the ob-

much can be gained by medical treatment, even though surgery is to follow for stone or for an unrelaxing sphincter of Oddi. First the sphincter mechanism should be relaxed if possible with the antispasmodic drugs such as atropine. This is frequently used in combination with small amounts of barbiturate. Some patients will not tolerate atropine and other antispasmodics such as trasentine, et cetera, may be used. Along with relaxing the sphincter, the emptying function of the gall bladder should be stimulated. Cholagogues such as the bile salts, magnesium sulfate, aloes, et cetera, may be given. Andresen[1] has pointed out that normal stimulation of the emptying of the gall bladder is produced by the presence of emulsified fat in the duodenum. Formerly all patients with biliary tract disease were placed on low-fat diets as there was less danger of provoking an attack. Many patients automatically place themselves on this diet as they find that fatty foods cause distress. However, this low-fat diet only produces more stasis and furthers the progress of the disease. Therefore, the patient who for any reason is postponing operation, the patient with non-calculous cholecystitis and the cholecystectemized patient, all should be given high fat diets. The best tolerated fatty foods are butter, cream, eggs and olive oil. Better patient co-operation will be obtained if these are added to the diet slowly and to the patient's tolerance. It should also be explained to the patient that his symptoms may be increased temporarily but that they will ultimately decrease.

Frequently when the stomach is examined by x-ray in patients with cholecystitis, there is found to be a rapid emptying time associated with low gastric acidity. Much of the belching and bloating that these patients complain of can be eliminated by the use of hydrochloric acid itself or by the glutamic acid preparations which are easier to take.

With the reduction of stasis there is less chance of infection occurring in the biliary tree. The sphincter of Oddi seems to be an excellent guardian against ascending infection so that this path is rarely the route of infection into the biliary tree.[1] Cholecystitis does, however, frequently follow infection in other parts of the body such as the intestinal, respiratory or genital tract. Because of this, foci of infection should be carefully searched for and eliminated in these patients.

A discussion of the treatment of metabolic and allergic disorders is not within the scope of the paper. Suffice it to say that should a patient with symptoms of cholecystitis have one of these disorders, treatment of that disorder would be undertaken by a physician competent in that field concomitantly with treatment of the cholecystitis.

It has been recommended[6] that all patients with the slightest symptoms of indigestion be x-rayed to determine early the presence of gastrointestinal malignancy. So too should these patients have x-ray studies made of the gall bladder to determine its status. This is not to minimize a careful and detailed history and physical examination which are of prime importance. Belching, bloating, gas eructations and complaints of pain either abdominal or thoracic should be investigated with the biliary tree in mind as a possible or probable offender. Gallstone colic or the acutely inflamed gall bladder with localized tenderness, spasm or a palpable empyema are rarely missed, but the patient with indigestion may be allowed to go with only palliative treatment and without a thorough investigation.

The results of x-ray examination of the gall bladder have been divided as follows:[15]

Group I.	Stone positive.
	(a) Calcareous.
	(b) Non-opaque.
Group II.	Absence of shallow.
	75% have stones.
	15% have extensive disease of the gall bladder without stones.
	7-8% have extrabiliary tract disease such as cirrhosis and carcinoma.
	2-3% are errors.
Group III.	Pathologic non-calculous.
	Lack of concentration or filling or emptying power.
	10% have stones.
Group IV.	Normal.
	95-97% accurate.

Where there is definite x-ray evidence of stones we believe that with few exceptions the patient should be operated upon. The dangers of perforation, common duct stone and associated hepatitis or pancreatitis with the possibility of pancreatic fat necrosis far outweigh the operative risk in most patients. We must also remember that 95 per cent of carcinoma of the gall bladder is associated with stones. These dangers can be well illustrated by the series of Jaguttis.[4] He followed 114 patients with cholelithiasis treated conservatively for twenty-five years. Five patients died of cancer of the gall bladder. This is a high percentage, as the

average is 2.5 per cent of cases in which gallstones are present. Thirteen cases died of cholecystic disease. Twenty-five cases were operated on for complications, and four of these died. This adds up to a terrific mortality rate not to consider the morbidity involved in these 114 cases. When we compare these figures with an operative mortality of less than 1 per cent when cholecystectomy alone is done,[3] we can see little excuse for allowing gallstones to remain as a Damoclean sword to threaten the patient. It might be well to point out that the mortality from operations on the biliary tract is now less than one-tenth that of fifteen years ago. Thomas G. Orr[12] reports:

Mortality rate of all operations upon the biliary tract.

1931-1936 5.6%
1936-1941 3.7%
1941-1946 0.4%

Our own figures for 451 cases from 1942 to 1947 show a mortality rate of 0.9 per cent where cholecystectomy alone was performed.

Not only should gallstones as a rule be treated surgically, but every effort should be made to discover them early and remove them before the patient gets into the older age groups. Glenn[11] reports that the mortality in acute cholecystitis, in the group over fifty, is almost five times as great as in the group under fifty. His figures in 527 cases operated at The New York Hospital are:

Over 50 years of age—mortality rate, 5.14%
Under 50 years of age—mortality rate, 1.13%

It is in the next group of patients, those with absence of shadow by x-ray, that a good history and physical examination are of greater importance. Our interpretation of the x-ray findings is colored by the patient's history. If the patient has had chills and fever and typical colic, we usually can be certain that the patient has stones. The usual figure is given as 75 per cent of these cases containing stones. By operating only in the cases in which the history and physical findings fit in with the x-ray results, 86 per cent of the patients with non-visualization whom we operated upon had stones.

In the third group, consisting of impaired function, only 10 per cent have stones. Great care must be exercised here in deciding upon operation. Two-thirds of our operative cases in this group had stones. The majority of these cases are best treated medically and rechecked by x-ray from time to time. Many of these will later give normal x-ray pictures.

Patients with normal function by x-ray should not have operation on the gall bladder unless it is for exploration along with suspected lesions elsewhere. All of our cases with normal gall bladder by x-ray had no stones at time of operation.

Whenever possible, it is well to have an electrocardiogram, x-ray of the chest and gastrointestinal system as well as a Graham-Cole test. These examinations help to eliminate the puzzling cases of gall-bladder disease associated with diaphragmatic hernia, gastric and duodenal ulcer, carcinoma of the pancreas, ampulla of Vater and transverse colon, duodenal diverticula, right lower lobe pneumonia and appendicitis in a high appendix, especially if it is retrocecal.

Cardiac conditions, usually coronary sclerosis or occlusion, are frequently confused with biliary tract disease. To make matters worse, they frequently occur in the same patient. Wakefield[16] states that "disturbances in cardiac rhythm frequently accompany gallstones" and further, by means of the electrocardiograph he has shown that distention of the human gall bladder can cause "changes in heart rate, disturbances in rhythm and conduction and some alteration of the T waves."

Breitwieser,[2] in a study of seventeen cases of calculous cholecystitis and one case of non-calculous cholecystitis, all of which had abnormal preoperative tracings, found that "including those with cardiac symptoms as well as those without, 50 per cent showed reversion of the T waves toward normal following gall-bladder surgery." It was Wakefield's conclusion that "in properly selected cases, cholecystectomy frequently restores regular heart rhythm and at least ameliorates anginal pain." This agrees with our clinical findings that many patients who complain of cardiac symptoms before operation, lose these complaints or at least they are frequently lessened after operation. However, recent thrombosis or decompensation contraindicated operation, as a rule. In exceptional cases we have performed cholecystostomies for acute cholecystitis in severe cardiac patients under local anesthesia with the patient in a semi-sitting position.

Poor results following operation have in the past been attributed to insufficient care in diagnosis or to operations done by inexperienced surgeons with incomplete operations or accidents involving the common duct or hepatic or portal vessels. The first of these causes of poor results we try to eliminate in our own cases by operating only in those

cases in which we can be assured that stones are present. As to the second cause of poor results, the best of surgeons still have accidents in the porta hepatis and everyone is aware of the dangers of operating in this area. Any surgeon operating on the biliary tract should not only be familiar with the anatomy involved but with the many types of accidents that may occur. He should, in addition, know the methods of repairing any accidental damage that may occur.

There is a third consideration which is frequently overlooked, and that is preoperative and postoperative care, not only in the hospital but before hospitalization and after leaving the hospital. A fourth consideration which can be discussed with the third is that often too much is expected of the operative procedure. It must be remembered that operation is performed for the complications of biliary tract disease. If the dangers attendant to that complication can be removed, then the operation has benefited the patient. If the disease has been cured by operation, then surgery has achieved a higher goal. Cholecystic disease is usually only a part of disease of the entire biliary tree and may involve adjacent organs such as the liver, pancreas and duodenum. Cholangitis, hepatitis, pancreatitis, gastritis and duodenitis must be treated, and we cannot expect cholecystectomy alone to cure them. The diet with ample fat suggested in the early part of this paper, together with the antispasmodics, cholagogues and sedatives, can be adjusted to a bland diet to overcome inflammation of the gastrointestinal system. Adequate amounts of carbohydrates and amino acids may be given along with the vitamins for liver protection. Occasionally, patients that do poorly after operation may have a sphincter of Oddi which will not relax even under medical treatment. If there is a junction of the common duct and the pancreatic duct above this sphincter, then there may be a reflux of bile into the pancreatic ducts, or vice versa, to produce choledochitis. These cases may need reoperation and severing of the sphincter, as advocated by Colp and Doubilet.[7] They have perfected an instrument which can be passed into the duodenum through the common duct and sever the sphincter without the necessity of opening the duodenum.

Summary

There are many reports in the literature that a high percentage of our population is or will be affected by biliary disease. Progress of the disease in many cases may be arrested and complications, including the formation of stone, prevented, by the use of a diet high in fats, along with antispasmodics, cholagogues and the elimination of foci of infection. Therapy is based upon evidence that the main causes of cholecystitis are pancreatic regurgitation, concentration of bile, stasis and infection. When complications develop, then operation should not be long postponed. Stone formation is considered a complication which in most cases should be surgically treated. The best surgical results will be obtained by:

1. Operating only when there is assurance that stones are present.
2. A carefully and adequately performed operation.
3. Prolonged preoperative and postoperative care as described.
4. Treatment of associated inflammations, diseases and disorders.
5. There will be some cases in which results will not be satisfactory until a section of the sphincter of Oddi is performed. Probably the best method of sphinctotomy is that of Colp and Doubilet.

References

1. Andresen, F. R.: New York State J. Med., 45:2413, 1943.
2. Breitwieser, E. Ruth: Am. J. M. Sc., 213:598, (May) 1947.
3. Brooks, Clark D.; Connolly, P. J., and Murphy, R. T.: J. Florida M. A., 35:493, (Feb.) 1949.
4. Clagett, O. T.: S. Clin. North America, 25:929, 1945.
5. Cole, W. H.; Novak, M. V., and Hughes, E. O.: Ann. Surg., 114:682, 1941.
6. Collier, F.: Wayne County Medical Society Lecture, 1948.
7. Colp, R.; Doubilet, H., and Gerber, I. E.: Arch. Surg., 33:696, 1936.
8. Doubilet, Henry, and Mulholland, John H.: Ann. Surg., 128: 609, (Oct.) 1948.
9. Eliason, E. L., and Stevens, L. W.: Surg., Gynec. & Obst., 78:98, (Jan.) 1944.
10. Gatch, W. D.; Battersby, J. S., and Wakim, K. G.: J.A.M.A., 132:119, (Sept. 21) 1946.
11. Glenn, Frank: Rev. Gastroenterol., 14:227, (April) 1947.
12. Orr, Thomas G.: Am. J. Digest Dis., 14:89, (March) 1947.
13. Rehfuss, Martin E.: Rev. Gastroenterol., 14:227, (April) 1947.
14. Robertson, H. E., and Dochat, G. R.: Internat. Abstr. Surg., 78:193, (March) 1944.
15. Tice, Frederick: Practice of Medicine, Vol. 7, p. 152, Hagerstown, Md.: W. F. Prior Co., Inc., 1940.
16. Wakefield, Howard: M. Clin. North America, 31:161, (Jan.) 1947.
17. Womack, Nathan A.: In commenting on Reference No. 4.

MSMS

The Government is building hospital buildings for various services, Army, Navy, Public Health, Veterans Administration. As a result of the Hoover survey the President cancelled two hundred eighty-four million dollars worth of Government hospital buildings some months ago, but pressure upon the Congress restored every dollar of that amount with orders to construct those buildings. A study of efficiency in Government hospitals shows a tonsillectomy in private or civilian hospitals averages 1.4 hospital days. Hospitalization in Public Health service hospitals average 6.8 days, in Veterans Administration hospitals 15.1, and in Army hospitals 16.1 days—other services in proportion.—*Hoover Commission Report.*

Indications for Surgery in Gall-bladder Diseases

By Robert M. Zollinger, M.D., and Stanley O. Hoerr, M.D.

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DESPITE THE ever-improving morbidity and mortality rates in biliary surgery, many physicians still hesitate to advise cholecystectomy except in the presence of serious complications. This attitude in the profession has been fostered by follow-up reports of unsatisfactory results in former years. Furthermore, patients themselves not uncommonly refuse operation, not for fear of a risk of death which is less than one in a hundred, but because of the "rumor" that they may continue to suffer afterwards from the same symptoms which brought them to the physician in the first place. It must therefore be accepted that enough of these "symptomatic failures" occur to color the view of both physician and patient, and to result in some instances in disastrous procrastination.

The difficulty ought not to lie in establishing a diagnosis. The demonstration of a pathologic gall bladder by means of cholecystography is very accurate. The principal problem seems to exist in correlating symptoms with the cholecystogram, and in predicting with some exactness the degree of relief to be obtained by operation. If the complaints of the patient have been minimal and no striking symptomatic benefit is to be expected, both physician and patient must weigh the attractive aspects of an indefinite postponement of operation against the risk of serious complications in the future, such as acute cholecystitis or common duct stone.

Individualization of cases is essential if physician and surgeon are to obtain consistently good results. Each patient must have a thorough survey with particular reference to the possible coexistence of other disorders before being subjected to operation. The best results follow biliary surgery in the patient who has had colic and in whom gallstones are found at operation. Conversely, poor results are obtained in the patient whose complaints have been vague and mild and whose gall bladder showed little pathologic change. Even if the patient has had the classical syndrome of biliary colic sufficiently severe to require narcotics, a confirmation of the diagnosis by cholecystogram and a thorough study of the entire gastrointestinal tract are advisable before recommending operation. The physician can conveniently carry out such a survey while judging the "pro's" and "con's" of early surgery. The final decision will then be based upon a careful evaluation of all data, and if operation is to be recommended largely for preventative considerations, the patient can be so informed.

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Surgical Implications of Cholecystograms

Since the diagnosis of gall-bladder disease is so easily confirmed by means of cholecystogram, this method of examination should be utilized routinely for guidance in the selection of patients for operation. Excellent results from operation can safely be predicted for the patient with colic if stones or milk of calcium bile are demonstrated at the time of cholecystogram. It will be recalled that only about 5 per cent of all gallstones have sufficient calcium to show up on the plain x-ray of the abdomen. Under our plan of selection, about 95 per cent of the gall bladders removed have contained stones. The patient who has gallstones without colic is discussed under "silent gallstones".

A second group of patients will show no filling of the gall bladder on cholecystogram and consequently no demonstration of gallstones. Unless there has been a history of typical gallstone colic severe enough to require narcotics, a repeat cholecystogram with reinforcement of the dye is very desirable. In the group will be found some patients complaining of vague epigastric distress, flatulence, and food intolerance. Since carcinoma of the stomach or colon, for example, may produce symptoms simulating gall-bladder disease, the physician should insist upon a complete x-ray survey of the gastro-intestinal tract. In these patients, it is usually a mistake to promise freedom from all complaints after operation, and it is often advisable to postpone operation.

The cholecystogram in a very few patients may show irregularities of the gall bladder suggesting a tumor such as an adenoma. These patients deserve a cholecystectomy, as prophylaxis against malignancy. Much change in their symptomatology is not anticipated if their complaints have been mild and variable.

Too much emphasis is sometimes placed on poor filling, delayed emptying, or an unusual size or shape of the gall bladder. In such instances we do

not advise cholecystectomy unless the patient has had repeated attacks of gall-bladder colic. On the other hand, we have observed patients with normal cholecystograms who continued to have repeated severe attacks of colic. Despite the negative cholecystogram, very small calculi were found at the time of cholecystectomy. Relief of symptoms was obtained.

Although the high degree of accuracy of cholecystography is universally acknowledged, it is well to remember that it is only a confirmatory laboratory test and as such must fit in with the clinician's evaluation of the patient. A non-filling of the gall bladder in one examination should not be considered an absolute indication for operation in the absence of classical, severe symptoms. A few patients will not take all of the gall-bladder dye, or may vomit or regurgitate some of the ingested dye. There may be gastric retention of the dye especially in a patient with an active duodenal ulcer, or, for some other reason absorption may be faulty and a normal gall bladder cannot be visualized. For this reason we invariably recommend in doubtful cases a repetition of the cholecystogram, and we question the patient closely regarding the amount of dye ingested and retained. It should be noted that cholecystography is of no diagnostic aid in the jaundiced patient, since an impaired liver will interfere with concentration of the dye by a normal gall bladder. There is no better way to improve the results in biliary surgery than to avoid operation on those patients with vague symptoms and questionable evidence of gall-bladder disease as shown by cholecystogram.

Cardiac Patients with Gall-bladder Disease

It is a common observation that a diseased gall bladder may produce symptoms which mimic cardiac disorders. Most cardiologists are firm in their conviction that it is beneficial to the patient to have a diseased gall bladder removed in the presence of cardiac disease which may include a previous coronary thrombosis. Their confidence has not spread to the medical profession at large, and is rarely shared by the individual patient. In our opinion cardiovascular disease does not alter the surgical indications in acute cholecystitis, in recurrent colic from a diseased gall bladder, or in suspected common duct stone. Gall-bladder attacks may actually intensify heart disease by precipitating congestive failure or aggravating attacks of angina pectoris. Although gall-bladder pain may mimic or coexist with cardiac pain, a congested tender liver may also simulate a tender gall bladder. Precise information must be had as to the cardiovascular status, and there must be an accurate estimate of the severity of the gall-bladder disease, as well as irrefutable evidence by cholycystography that the gall bladder is nonfunctioning. These patients do exceedingly well if sufficient time is taken to stabilize the cardiovascular system at an optimal level prior to operation. We have found the daily determination of vital capacity to be of great assistance in determining the optimum time for surgery in the poor-risk "cardiac". It has been our policy to delay operation until the vital capacity exceeds 1500 c.c., and we prefer to see it greater than 2,000 c.c.

In University Hospital there have been twenty-four patients with clear-cut cardiovascular disease undergoing operation for gallstones in the past two and a half years. This is approximately one patient in ten. They tolerate this type of operation well, even when exploration of the common duct is indicated. There were no deaths in this group, although eleven patients were more than sixty years of age.

There is no more grateful patient after operation than the "cardiac" who has suffered repeated attacks of gall-bladder colic over a period of years, and who has previously been denied the benefits of surgery because of the unwarranted fear on the part of the physician that the risk was too great. Furthermore, it is not uncommon to have the so-called "cardiac symptoms" disappear after operation. The increasing age of our population makes this problem especially important.

Silent Gallstones

One of the most controversial subjects in gall-bladder surgery concerns advice to the patient with so-called "silent" gallstones. The gallstones may be found at the time of pelvic operation or noted as a result of a gastrointestinal investigation for vague abdominal complaints. In deciding whether cholecystectomy is in the best interest of such a patient, the physician may be influenced by the size and number of stones. The large solitary calculus is less likely to cause difficulty than small stones which might either block the cystic duct or escape into the common duct. The physician must be on the alert for the confirmed psychoneurotic with a so-called "gastric neurosis", which originally led to the gastrointestinal survey and demonstra-

tion of choleliathiasis. If a cholecystectomy is recommended in the wild hope of relieving all symptoms in such a patient, both the physician and patient are doomed to disappointment. However, if the patient has an associated disorder such as duodenal ulcer, pancreatitis, or heart disease, operation should usually be urged even if the symptoms attributable to the gall bladder are mild in character. Control of a duodenal ulcer is more difficult in the presence of gallstones due in part to the fact that these patients cannot tolerate well the ulcer type of diet. The patient wih cholelithiasis who suffers recurrent bouts of pancreatitis must be strongly suspected of having a common duct stone. The physician must weigh the risk of surgery in the early stages when the diseased gall bladder or gallstones are discovered against the possible higher mortality rate from such complications as acute cholecystitis, common duct stone, or cancer of the gall bladder which may occur in later years. Although a substantial number of patients may harbor gallstones over many years without experiencing any symptoms, it is dubious whether delay in anticipation of recurrent symptoms is actually safer for the patient.

A study of our patients shows the median age in uncomplicated gall-bladder disease to be about forty-nine years. In acute cholecystitis it is fifty-five years, and in common duct stone it is fifty-seven years. As would be expected, the proportion of patients sixty years of age or more increases with the complications. For example, in uncomplicated gallstones, only 17 per cent of the patients are over sixty years of age. In all cases of gallstones it is 26 per cent, or one in four. In acute cholecystitis and common duct stone, almost 50 per cent of the patients are in the old age group. In the complicated cases, the history usually shows that the patient has suffered multiple attacks. It may be concluded that earlier operation in these cases would not only have reduced the operative risk several-fold but would also have spared the patient much suffering.

This is not meant to imply that every patient with silent gallstones should be rushed into operation. Operation is justifiably postponed in the obese patient until there has been a drastic reduction in weight. But the middle-aged patient should be apprised that he stand a very good chance of living long enough to develop serious trouble from his gallstones, necessitating operation at a later date and entailing greater risk. It should be recalled that 1947 statistics show the life expectancy for females to be 70.6 years and for males, 65.2 years. It is even greater for persons who have already attained middle age.

Acute Cholecystitis

There is little disagreement today among surgeons regarding the advisability of hospitalizing a patient as soon as the diagnosis of acute cholecystitis has been made. We are in accord with the principle that early operation should be considered in good risk patients within twenty-four to forty-eight hours of the onset of symptoms. Unfortunately it is rarely that the surgeon sees the patient before this period has elapsed. In approximately three-fourths of the patients, an attack of acute cholecystitis will subside under conservative management, but in the remaining patients it becomes worse and early surgical intervention becomes mandatory. Frequent re-evaluation is essential both by means of bedside visits and by laboratory aids, in order to determine the optimum time for operation. After fluid balance is established, exacerbation of pain which requires narcotics, increasing signs and symptoms in the region of the gall bladder, or early evidence of a developing peritonitis calls for surgical intervention. The possibility of gangrene or a perforation of the gall bladder should be considered if the white count exceeds 20,000. We are convinced that the mortality rate associated with acute cholecystitis will be lowered if patients are operated upon at anytime during the day or night when they fail to show evidence of continued improvement. If the surgeon takes advantage of the cleavage planes developed by the acute inflammatory process in the wall of the gall bladder, it is possible to do a complete cholecystectomy in the majority of cases without excessive loss of blood. However, if an abscess is encountered or the technical approach seems unduly difficult, the procedure of choice may be simple drainage of the gall bladder with removal of as many calculi as possible. Occasionally a cholecystostomy under local or regional anesthesia will be a life-saving procedure in the very ill poor-risk patient.

If the patient is seen late in the course of the disease with decreasing signs and symptoms, or if he is an elderly "poor risk", conservative management is justified as long as improvement is steady; operation can then be performed as a semi-elective procedure some five or six days after hospitalization. No striking benefit is to be expected from antibiotics preoperatively, due to the fact that acute

cholecystitis is so often due to a chemical irritation from a stone blocking the cystic duct, rather than bacterial invasion.

Common Duct Stone

The presence of common duct stones is usually suspected on the basis of a history of jaundice, colic, vomiting, chills and fever and a more remote past history consistent with the diagnosis of cholelithiasis. All too frequently the diagnosis is not considered unless the patient is jaundiced at the time of operation.

An analysis of our cases with common duct stone showed some interesting facts relating to jaundice. For example, in twenty-one patients who were jaundiced while in the hospital, common duct stones were recovered in fifteen, or nearly three-fourths. On the other hand, a common duct stone was found in only four out of twenty-four cases in patients giving a past history of jaundice. It is of considerable interest that a common duct stone was recovered in twelve out of twenty-five patients who had never given a history of jaundice. It is apparent from these observations that jaundice should not be the only indication for exploration of the common duct.

In a study of technical criteria for exploration, we have found at operation that the size of the common duct in relation to normal is of considerable significance. In twenty-nine cases the common duct was described as quite large, and stones were recovered in seventeen of these cases. Likewise, stones were recovered in ten out of twenty-two ducts which were described as moderately enlarged. In only one case out of ten was a stone recovered when the duct was described as normal. It may well be that a fair percentage of the unsatisfactory results of gall-bladder surgery in the past has been due to the fact that an insufficient number of patients have had the common duct thoroughly explored.

The surgeon rather than the physician must be concerned about the possibility of a common duct stone because of his responsibility for exploring thoroughly the extra-hepatic biliary ducts. It has been our finding that approximately one-half of all patients subjected to cholecystectomy deserve an exploration of the common duct. During the past two and one-half years, 47 per cent of the common ducts were explored, and common duct stones were recovered in almost 50 per cent of the ducts explored, or 20 per cent of all cases. The over-all mortality was 2 per cent.

Recurrent Symptoms after Cholecystectomy

The patient who complains of pain or digestive disturbances after biliary surgery may present a very thorny problem. Usually the trouble is ascribable to one or more of three fundamental reasons: (1) Incorrect preoperative diagnosis including poor selection of the patient for surgery. Attention to the principles already outlined will help reduce this group to a minimum. (2) Incomplete surgery or complications resulting directly from surgery. (3) Residual, non-operable disease of the biliary tract, the so-called "biliary dyskinesias".

The patient who has had a surgical drainage and removal of stones, without subsequent removal of the gall bladder, is very likely to have a recurrence of symptoms. Complete removal of the gall bladder usually effects a cure. It is therefore important for the physician to obtain an accurate description of any previous operations. Less well recognized is the fact that incomplete removal of the cystic duct may also result in a recurrence of symptoms. While cholecystography is without value in such instances, occasionally a plain x-ray of the gall bladder region will demonstrate calculi. We have recently encountered several patients with biliary colic occurring many years after cholecystectomy. The symptoms were so severe and classical that exploration seemed warranted. At the time of operation a remnant of cystic duct an inch or longer was found containing small stones or gravel. The surgeon must remove the entire cystic duct down to the point where it joins the common duct, if such distressing sequellae are to be avoided.

There is another group of patients in which the symptomatology is due to an overlooked common duct stone. As pointed out previously, unless the common duct is opened in 40 per cent or more of the cases, and common duct stones recovered in about 20 per cent, the best results cannot be expected. Fortunately the number of accidents at the time of biliary surgery resulting in stricture formation are not too common, but all surgical clinics are confronted with a few of these patients every year. It is well for the surgeon to remember that there are more anomalies of blood supply and ducts in the region of the gall bladder than in almost any other part of the body, and great care must be exercised in technique in even the simplest case. Once

the physician has exhausted all forms of medication, and if after thorough investigation of the patient, he is convinced that the patient retains a pathologic condition accounting for symptoms similar to those preceding removal of the gall bladder, exploration is advisable. In a large proportion of such thoroughly screened patients, the difficulty can be corrected.

There is a third group of patients in which residual disease of the biliary tract, including cholangitis, hepatitis, or "biliary dyskinesia" apparently occurs. It is unwise to accept such a diagnosis without a thorough study of the patient, including a complete investigation of the gastrointestinal tract. Early operation with complete removal of all pathologic conditions may decrease the number of such patients, but we know of no specific medication which has been routinely efficient in alleviating symptoms in this group.

Summary

Modern methods have increased the scope and safety of biliary surgery. The results will be satisfactory to patient and physician alike if certain basic principles are adhered to rigidly in the selection of patients, and in the performance of the operation:

1. A proper interpretation of symptoms. This frequently entails a complete x-ray survey of the gastrointestinal tract.
2. Unequivocal evidence of gallstones or gall-bladder disease by means of cholecystography.
3. Complete removal of the pathologic condition at operation. This implies a removal of the gall bladder and entire cystic duct, and recovery of common duct stones in approximately 20 per cent of all patients operated upon and in nearly 50 per cent of those whose common duct is explored.

Elderly patients and patients with cardiovascular disease withstand biliary surgery extremely well and are entitled to its benefits for the same indications utilized in patients without these handicaps.

A more liberal attitude toward cholecystectomy for "silent" gallstones will reduce the incidence of complications of gall-bladder disease occurring in older "poor risk" patients.

References

1. Comfort, Mandred W., Gray, Howard K., and Wilson, James M.: Silent gallstone—10 to 20 year follow up, study of 112 cases. Ann. Surg., 128:931, 1948.
2. Morton, Charles Bruce II: Post-cholecystectomy syndrome due to cystic duct remnant. Surg., 24:779. (Nov.) 1948.
3. Twiss, J. R., and Carter, R. F.: Should your patient's gall-bladder be removed? J. Post Grad. Med., 5:1, (Jan.) 1949.
4. Womack, N. A., and Crider, R. L.: The persistence of symptoms following cholecystectomy. Ann. Surg., 126:31-55, 1947.

Cancer in the Jewish Race

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THE CANCER MORTALITY in Jews and non-Jews among whom they live is almost identical, according to Polduan,[16] or slightly less in Jews, quoting Horwitz.[11] This is true for both sexes. The cancer peak occurs earlier in life in Jews of both sexes. Though this similarity in cancer rates is true for most forms of cancer such as skin, lip, breasts, and lungs, there are exceptions.

Cancer of the Tongue and Buccal Cavity

Fournier[8] first emphasized the importance of syphilis in the causation of tongue cancer in 1906. Beeson[1] confirmed this, noting that patients with this lesion were more likely to have positive serologies than any other form of cancer. Eller and Anderson[6] in their series found 60 per cent due to syphilis. Belote[2] found that 30 per cent had positive serologies in a study of tongue cancer at the University of Michigan, that cancer of the tongue appeared on the average eight years earlier in syphilitics, and though syphilis was an important factor in the etiology of tongue cancer in the male, it was not in the female. This may account for this lesion being more than four times as frequent in males.

Craig[4] found syphilis of importance in 14.5 per cent and also noted that tongue cancer was uncommon in Negroes despite the high percentage of syphilitics in this race.

Syphilis is less common in Jews due to universal circumcision in this race.[9] This may be the reason that cancer of the tongue, according to Polduan,[16] is at least four times rarer in Jews compared with Gentiles. Cancer of the tongue is extremely uncommon in Jewish women.

Cancer of the Gastrointestinal Tract

Carcinoma of the gastrointestinal tract, including the peritoneum, is twice as common in Jews, a fact which is true for males and females, according to Polduan.[16]

Cancer of the Male Reproductive Tract

Polduan[16] stated from a study of cancer mortality in New York City that cancer of the male

reproductive system is 50 per cent higher in Gentiles. This difference is almost entirely due to the fact that cancer of the penis is almost unknown in Jews. Ravich[13] reported that carcinoma of the prostate also was rare in Jews, a fact not confirmed by Ney and Moody.[12]

Demarquay and Barney found cancer of the penis associated with phimosis in 80 to 85 per cent of cases. The chronic irritation and infection, associated with prepucial adhesions, accumulation of decomposing smegma, and concretion formation under the phimotic foreskin, are certainly important causes of this type of cancer.

Cancer of the penis is very rare in the circumcised. Hoffman[10] stated that this lesion was unknown in Jews, due to the orthodox being circumcised on the eighth day after birth. According to Wolbarst,[17] cancer of the penis is common in Hindus, who almost never circumcise and less common in Arabs, who circumcise in the thirteenth year. Dean[5] confirmed these findings, stating that the early circumcision as practiced by orthodox Jews gave them immunity against cancer of the penis, an immunity they have to no other form of cancer. He believed Arabs had only partial immunity, as they circumcised in the thirteenth year, and strongly advised all males be circumcised very early in life. He did report one case of Grade 2 squamous cell cancer of the external urinary meatus in a Jew circumcised on the eighth day. He believed this to have been due to irritation from the urine. He reported three cases of cancer that started in the scars of circumcision done late in life. He believed cancer does not start in scars that heal by primary intention. Circumcision done early in life usually heals by primary intention.

Ewing[7] found syphilis and phimosis to be the chief causes of penile cancer. This is not likely in the case of syphilis, as some Jews do develop syphilis whereas penile cancer is almost unknown in this race.

Venereal warts also have been given as a cause of this cancer. Venereal warts are almost unknown in the circumcised.[9] Cancer of the penis is rare in the circumcised. Their occurrence together at times could be explained as a pure coincidence.

The rare condition, erythroplasia of Querat, a form of intraepithelial epithelioma found on the glans and foreskin, is very rare in the circumcised.

Cancer of the Female Reproductive Tract

Theilhaber[14] found cancer of the uterus, including the cervix, to be uncommon in Jewish women. Polduan,[16] in a small series of cases, did not find any significant difference. Horwitz,[11] in a study of 1,237 cases of uterine cancer at the Mayo Clinic, found cancer of the uterus in only ten Jews. The reasons for this difference has been the subject of considerable conjecture.

Cancer of the uterus is almost entirely confined to women who have borne children, the average births being five, which is higher than the average. This is also true of those rare cases of uterine cancer seen in Jewish women. It is well known that Jewish women have large families and that cervical tears and lacerations are common in this race. Despite this, carcinoma of the uterus, including the cervix, is rare in this race. Vineberg[15] found this to be so even in those with extensive cervical tears.

Bessesen[3] perhaps facetiously discussed the possibility that cancer of the penis was due to a virus that grew in the smegma beneath the phimotic penis and that this same virus was carried to the cervix during coitus, causing cervical cancer. He wondered if this could account for the extreme rarity of cancer of the penis in Jews and the rarity of cervical cancer in Jewish women.

Ewing[7] mentions that fibromyomas may be of etiologic importance in uterine cancer, but these are common in Jewish and Negro women in whom uterine cancer is less common than in other women.

Vineberg[15] believed that observance of the Mosaic law, forbidding coitus during the seven days after menses and also for a time after childbirth, might account for the infrequency of this form of cancer in Jewish women. He also wondered how many followed these rules, humans being as they are.

Syphilis, with associated precancerous leukoplakia of the genitalia, and gonorrhea, with associated chronic inflammation, are less common in the Jewish race. Perhaps this may account for the difference in frequency of cancer of the female generative tract in Jewesses and Gentile women.

References

1. Beeson, B. B.: Urol. & Cutan. Rev., 40:575, (Aug.) 1936.
2. Belote, G. H.: J.A.M.A., 94:1985, (June 21) 1930.
3. Bessesen, D. H.: M. J. & Rec., 135:490, (April) 1932.
4. Craig, N. A.: J.A.M.A., 75:858, (Sept. 25) 1920.
5. Dean, A. L.: Tr. Am. A. Genito-Urin., Surgeons, 29:493, 1936.
6. Eller, J. J., and Anderson, N. P.: J.A.M.A., 94:382, (Feb. 8) 1930.

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Head and Neck Cancer in Detroit

Statistical Survey in 1946

By Harry C. Saltzstein, M.D., Robert S. Pollack, M.D., and Julian Stern, M.D.

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CANCER OF THE head* and neck represents about 4 per cent of all cancers. Its low incidence is attended by a high mortality rate and still higher morbidity. The infrequent occurrence of this condition as seen in daily practice tends to delay prompt diagnosis and treatment. Variously treated by oral surgeons, otorhinolaryngologists, radiotherapists, general surgeons, and sometimes by dermatologists, with responsibility ofttimes amongst several physicians, the criteria governing treatment and management of these patients are not always standardized.

Knowledge of the total hospital incidence of cancer in a community, as compared to statistical analyses from single institutions and Health Department Vital Statistics, is sorely lacking. Some of it can be obtained without too great effort. Often, it is very important information from the viewpoint of the patient who receives his treatment in the average hospital, not the Cancer Center or the University Clinic.

For these and similar reasons, it was thought that a composite picture of cancer of the head and neck in the hospitals of a large metropolitan community would be worthwhile.

Method

The hospital record rooms and x-ray therapy departments of all the hospitals in Detroit and its metropolitan area were contacted.** The charts of all patients with cancer of the lip, floor of the mouth, tongue, buccal mucosa, upper and lower gums, mandible, tonsil, tonsillar pillar, sinuses, nasopharynx, hypopharynx, palate, and larynx (intrinsic and extrinsic) who were treated in 1946 were studied. Co-operation was graciously extended everywhere. Only those patients were included whose treatment was started in 1946. Treatment may have been given as an outpatient or regular hospital admission. When a patient was seen at a hospital, and only a biopsy obtained, the case was not included in the survey. Our main interest centered on the total number of cases, the stage of disease (early, moderately advanced, or advanced), and whether treatment was by surgery, irradiation, or both.

The purpose was to get a brief but over-all study of these patients as they were treated in the hospitals of a large metropolitan area in one year.

TABLE I. CARCINOMA OF MOUTH AND LARYNX IN DETROIT, 1946

HOSPITALS AND BEDS

Number of Hospitals	Beds	Total Beds	Cases
8	300—500	3576	249 (95.77%)
22	50—299	2469	11 (4.23%)
17†	10—49	601	0
Total 47		6646	260

†Five institutions containing a total of 277 beds not included.

General Considerations

Collected in the above manner, we found that there were 260 patients with carcinomas of the mouth and larynx treated in all of the Detroit hospitals in 1946 (Table I).† It can readily be seen that practically all (96 per cent) were cared for in the eight major hospitals of 300 to 500 bed capacity. These eight hospitals comprised about half of the total bed capacity of the city. A number of small institutions under fifty beds were included since they all had operating rooms, x-ray diagnostic units and laboratories, and cared for routine major surgical and medical cases.* There were no mouth or larynx cancer cases treated in any of these small hospitals of less than fifty beds.

The reason for the concentration of these patients in hospitals of 300 and over is not entirely clear, but is due partly to the fact that the larger institutions have radiation therapy departments which attract many patients with mouth and laryngeal cancer. In addition, the problems and techniques incident to the care and treatment of these patients cannot be adequately met at all hospitals.

Dr. Pollack is now Director, Tumor Clinic, U. S. Marine Hospital, San Francisco, California.

*Exclusive of the brain.

**Cases treated in doctors' offices (e.g. Oral surgeons, x-ray laboratories, etc.) would not be included in this data.

†In 1946, the Health Department listed the following compilation of deaths from cancer of the mouth and larynx:

Lip	5	Pharynx	20	Mouth	11
Tongue	20	Larynx	25	Jaw	1

Total 82

These included only cases registered as having died in the City of Detroit. The estimated population of Detroit in 1946 was 1,785,000; that of the metropolitan district was 2,226,100.

*Psychiatric, tuberculosis, and contagious disease beds were omitted in this survey. Obstetric and pediatric beds in general hospitals are included in the total number of beds.

Special operative procedures, nursing care, and supportive measures are often obtainable only at larger institutions. The fact, too, that these patients are treated by specialists in one or other branches of medicine would also tend to concentrate them in the larger institutions.

The data collected comprised an appraisal as to whether the case was early, moderately advanced, or advanced, and whether the treatment was by surgery, by x-ray and radium, or by a combination of both methods. The criteria for determining the stage of the disease were as follows:

Early.—A tumor 1.5 centimeters or less in size without extension, invasion, or metastasis. In the larynx, when limited to one vocal cord alone.

Moderately Advanced.—A tumor 1.5 to 2.0 centimeters or more in diameter with some local extension. This extension is minimal. There may be surrounding induration about the primary, but not involving adjacent areas to the point of complete inability to swallow, talk, or perform normal functions. Tumors with metastasis to the neck are included in this stage only if these metastases are small and readily amenable to treatment. A curable lesion.

Advanced.—Any statement on the chart as to clinically advanced or extensive disease. Large metastases to neck nodes or below the clavicle. A long clinical history and obvious emaciated or cachectic state: inability to swallow, pain on swallowing, much weight loss, and marked involvement of local areas about the primary tumor. All hopeless cases are included in this category.

TABLE II. TOTAL PATIENTS TREATED IN ALL HOSPITALS IN DETROIT IN ONE YEAR, 1946

TABLE IIA—Anterior Mouth

	Total	Stage			Treatment			
		Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Lip, Upper	9	6	3	0	3	5	1	0
Lip, Lower	52	26	19	7	15	34	3	0
Floor of Mouth	16	3	7	6	3	10	0	3
Tongue	56	4	26	26	4	35	9	8
Buccal Mucous Membrane	5	1	4	0	0	5	0	0
Gums	5	0	2	3	0	4	0	1
Mandible	2	0	1	1	1	1	0	0
Total	145	40	62	43	26	94	13	12

TABLE IIB—Posterior Mouth

	Total	Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Tonsil	11	1	5	5	0	9	2	0
Tons. Pillar	5	0	2	3	4	1	0	0
Sinus	3	1	1	1	0	1	2	0
Nasopharynx	11	1	4	6	1	10	0	0
Pharynx (Hypo)	9	0	1	8	0	8	0	1
Palate	10	0	6	4	2	7	0	1
Total	49	3	19	27	7	36	4	2

TABLE IIC—Larynx*

	Total	Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Intrinsic	23	5	13	5	6**	5	7**	5
Extrinsic	38	2	1	35	2	25	2	9
Total	61	7	14	40	8	30	9	14
Misc. Neck Nodes (Primary Undetermined)	5	0	0	5	3	1	0	1
Totals	260	50	95	115	44	161	26	29

*Tracheotomy, tracheostomy, biopsy are not included.
**All surgically treated cases had either local destruction, laryngofissure or laryngectomy.

Collected Data

Table II shows in detail the total number of cases of cancer in each anatomical site. For convenience this table is divided into three parts: (A) the anterior regions of the oral cavity, (B) the posterior portions and the mouth and pharynx, and (C) the larynx. Of the eleven cases in hospi-

TABLE III. OPERATIONS DONE UPON 260 PATIENTS—CANCER MOUTH AND LARYNX, DETROIT, 1946

Site	Total No. Cases	Local Excision	Cautery Excision	Radical Neck Dissection	Local Neck Dissection	Hemi-glossectomy	Total Laryn-gectomy	Laryngo-fissure
Lip, Upper	9	4	0					
Lip, Lower	52	14	1	2	1			
Floor of Mouth	16	3	0	1				u
Tongue	56	9	1	3	2	3		
Buccal Mucous Membrane	5	0	0					
Gums	5	0	0					
Mandible	2	0	0					
Total	145	30	2	6	3	3		
Tonsil and Pillar	16	1	2					
Sinuses	3	2	0					
Nasopharynx	11	1	0					
Pharynx (Hypo)	9	0	0					
Palate	10	1	1					
Total	49	5	3					
Larynx, Intrinsic	23	3	0				3	9
Larynx, Extrinsic	38	0	0				4	0
Total	61	3	0				7	9
Neck Nodes	5	0	0	1	2			

tals under 300 beds, the selection and anatomical distribution is similar to those in the larger institutions: tongue, 4; buccal mucosa, 1; lip, 3; floor of the mouth, 1; tonsil, 1; larynx (extrinsic), 1.

Comments

It can be seen that three anatomical sites, lower lip, tongue, and extrinsic larynx account for more than half the total number of cases (146, or 56 per cent). The total number of posterior mouth and pharyngeal lesions is small.

In general, patients with lower lip cancers are the only ones who come for treatment early. Thirty-two (54 per cent) of sixty-one lip cancers were seen at an early stage. By contrast, of fifty-six tongue cancers only four (7 per cent) were considered early. In the total group of forty-nine posterior mouth lesions only three (6 per cent) were early. Of sixty-one larynx cases only seven (11 per cent) were limited to one vocal cord.

Lip cancer was the only tumor treated by surgery in any great number of patients. Of the sixty-one lip cancers eighteen had surgical excision, four had operation and irradiation, and thirty-five had irradiation alone. Only four of the fifty-six tongue carcinomas were treated by surgical removal alone. Nine had both operation and x-ray.

In group B (posterior mouth lesions) with few exceptions treatment was by irradiation. As noted, these tumors are usually diagnosed in a late stage. By virtue of their anatomical site, they lend themselves to irradiation therapy more readily than to surgery.

Six of twenty-three patients with intrinsic laryngeal cancer had operation performed, either local removal, laryngo-fissure or laryngectomy (tracheotomy is not included) and seven had operation combined with x-ray. Of the thirty-eight patients with extrinsic laryngeal cancer, only two were early. Two had operation only (laryngectomy) and two had operation (laryngectomy) combined with x-ray therapy.

Table III lists the total number of operations done in the entire series. Seven patients had a radical neck dissection. In two the primary tumor originated on the lower lip; in one on the floor of the mouth, and three on the tongue. In one patient the primary lesion was undetermined. Of the sixty-one patients with laryngeal cancer only seven had a laryngectomy (three intrinsic, four extrinsic). Nine patients with intrinsic laryngeal cancer had a laryngo-fissure.

In Table IV an attempt was made to determine whether the decision to treat patients with surgery or with irradiation differed in the eight major hospitals. In the smaller hospitals the numbers were too few for comparison. The sites chosen for study were the lower lip, the tongue, and the larynx (intrinsic and extrinsic). The number of early cases is tabulated for each type. The treatment (surgery, x-ray or both) includes the total number of cases in each category .

In Hospital B, nine patients with lip cancer (Table IV, A) had operation only performed and none had x-ray treatment. In Hospital D, of twenty-two patients none had operation only, one had a com-

bination of operation and x-ray, and twenty-one had x-ray therapy alone. The other institutions treated a total of eighteen cases, of which three had operation only, two both operation and x-ray, and thirteen x-ray only.

have good follow-up systems, but for mouth and larynx cases they were not complete. According to the charts and records examined, there was no institutional follow-up of any other surgically treated oral or larynx cases.

TABLE IV. TYPE OF TREATMENT AT EIGHT MAJOR HOSPITALS

Hosp.	A. Lip, Lower					B. Tongue				
	Total	Early	Treatment			Total	Early	Treatment		
			Surg.	X-ray	Both			Surg.	X-ray	Both
A	2	1	1	1	0	7	0	0	4	0
B	9	1	9	0	0	2	0	0	1	1
C	6	4	0	5	1	7	1	0	5	1
D	22	16	0	21	1	23	2	1	15	6
E	4	0	1	3	0	2	0	1	1	0
F	2	0	1	0	1	3	0	1	2	0
G	1	0	0	1	0	5	0	0	2	1
H	3	2	0	3	0	3	0	0	3	0
Total	49	24	12	34	3	52	3	3	33	9

Hosp.	C. Intrinsic Larynx					D. Extrinsic Larynx				
	Total	Early	Treatment			Total	Early	Treatment		
			Surg.	X-ray	Both			Surg.	X-ray	Both
A	1	0	0	1	0	9	0	0	8	0
B	5	1	3	1	1	0	0	0	0	0
C	3	1	0	1	0	2	0	0	2	0
D	4	3	2	1	0	13	2	1	8	2
E	1	0	0	0	0	0	0	0	0	0
F	3	0	1	1	1	0	0	0	0	0
G	0	0	0	0	0	8	0	0	5	0
H	6	0	1	0	5	5	0	1	3	0
Total	23	5	7	5	7	37	2	2	26	2

Hospital B was the only institution where, according to these figures, the surgical removal of lip cancer was popular.

In Hospital D (Table IV, B), of the twenty-three patients with cancer of the tongue one had a surgical excision and six had surgical excision combined with x-ray therapy. In the remainder of the fifty-two patients two more had surgical excision alone and three had combined surgical and x-ray treatment.

In laryngeal cancer (Table IV, C), the individual cases distributed in each hospital are too few to draw comparisons. All it indicates is how widely these cases are scattered, with no one institution caring for any large number of them, especially when it comes to surgical care.

Follow-up Records

As near as could be determined, one county hospital which had a large number of carcinoma cases, many of them in far advanced stages, has an excellent follow-up system. One private hospital, a closed staff clinic, has a follow-up system which includes all cases of cancer in all body sites treated in the hospital. Some of the x-ray therapy services

Conclusions

1. A survey was made of cancer of the mouth, pharynx, and larynx treated in Detroit in one year, 1946.

2. There was a total of 260 cases; all but eleven were treated in eight large hospitals which have capacities of 300 to 500 beds. The total beds in these eight institutions represents one-half of that for the entire community.

3. Carcinoma of the lower lip was the only cancer which was treated in an early stage (1.5 centimeters or less) in any large number.

4. Treatment of the entire group, in general, was by irradiation therapy. Except for the surgical treatment of lip cancer in one institution few operations were performed on the entire group of patients.

5. In this group, with the exceptions noted, follow-up was insufficient.

MSMS

Osseous metastases occur in one-half of all cases of prostatic cancer; in one-fourth of all cases of renal cell carcinomas and hypernephromas arising in the cortex of the kidney; in one-fourth to one-half of all cases of thyroid carcinoma; and in one-fifth of all cases of mammary carcinoma.

Detroit Physiological Society

Meeting of January 19, 1950

The Effect of Added Dietary Tryptophane on the Occurrence of Diethylstilbestrol-Induced Mammary Cancer in Rats

W. F. Dunning, M. R. Curtis and M. E. Maun
Detroit Institute of Cancer Research, Department of Pathology, Wayne University College of Medicine, and Deaconess Hospital, Detroit 1, Michigan

Three groups of A x C Line 9935 female rats with diethylstilbestrol pellets implanted in their scapular region, were placed on iso-caloric synthetic diets containing 26 per cent protein. The first group of twelve received the diet with 26 per cent casein, the second group of twelve received the same diet, substituting 24.6 per cent tryptophane-free casein hydrolysate and 1.4 per cent d-1 tryptophane for the casein, and the third group of fifteen received in place of the casein, 21.7 per cent tryptophane-free casein hydrolysate, plus 4.3 per cent d-1 tryptophane.

All thirty-nine rats lived more than 160 days, the minimum period before the occurrence of an induced mammary cancer, and thirty-two or 82 per cent developed multiple mammary cancers. Of the control group, nine or 75 per cent developed fifty-one gross cancers in an average of 363± 8.6 days; while 100 per cent of those which received 1.4 per cent d-1 tryptophane developed seventy-nine mammary cancers in an average of 316± 5.7 days, and nine or 60 per cent of the rats that received the high-tryptophane diet developed only thirty-one gross mammary cancers in an average of 399± 7.5 days.

The addition of 1.4 per cent of d-1 tryptophane increased the number and percentage of induced cancers and significantly reduced the average latent period below that observed for the control group. The greater increase in dietary tryptophane produced the reverse effect of a decreased number and percentage of induced cancers and a significantly prolonged latent period.

Current Studies on Rheumatoid Arthritis from the Standpoint of a Possible Virus Etiology

Cyril S. Stulberg and Dorothy B. Darling
Virus Laboratory, Children's Fund of Michigan, Detroit

Reports have shown that suspensions of particles resembling viruses were obtained from exudates of rheumatic patients and that these particles were specifically agglutinated by sera of patients with rheumatic disease. However, repeated efforts to establish an infectious etiological agent in rheumatic diseases have led to unsuccessful or equivocal results. As a phase of our combined biochemical and immunological studies on rheumatoid arthritis, some of the possible virus aspects of the disease were investigated.

In the present series, muscle biopsies and sera were collected from ten patients with active rheumatoid arthritis. Attempts to isolate a viral agent were almost wholly confined to muscle as the source material, since it has been reported that nodular inflammatory lesions occur in skeletal muscles in rheumatoid arthritis. Therefore, it seemed possible that an infectious agent might be found in areas exhibiting lesions. A suspension of muscle tissue was inoculated into chick embryos, six, eight and ten days of age by injection into the allantoic or yolk sac, or on the chorio-allantoic membrane. At least five subpassages were made by each route employing different incubation periods. None of the embryos developed significant lesions as evidence of infection. Attempts to demonstrate infection by chemical changes in the egg fluids also yielded negative results. No evidence of transmission of an antigenic agent detectable by complement fixation tests was obtained. Sera collected from these patients did not exhibit the presence of antibodies specific for several viral agents including those of influenza, mumps, and lymphocytic choriomeningitis, or for rickettsial agents including those of epidemic and murine typhus, and Q fever.

Ultrastructure of the Red Cell and Its Electron Microscopy

J. W. Rebuck
Henry Ford Hospital

Actual visualization of the protein cytoskeleton of the defatted erythrocyte ghost by Wolpers has lead to changes in the classic concept of the surface ultrastructure. Application of this concept makes possible an explanation of the sunburst effect produced upon the erythrocytic periphery by exposure to hemolysins in acquired hemolytic anemia. The breadth of the area of the surface ultrastructure reacting with the antibody corresponds in magnitude to the breadth of one or two of Wolper's fibrillar protein strands and falls well within the limits of the reacting areas in Pauling's three-dimensional visualization of antibody-antigen union. Among the forces to which maintenance of the biconcave disc form is attributed, least studied is the possibility of preferential arrangement of the erythrocytic interior, perhaps the hemoglobin molecules themselves, so that the forces between the interior molecules may be greater in one direction. Electron micrographs of the earliest stages in sickling may well throw light upon these forces. The early stages of anoxia in sickle cell trait and sickle cell anemia cells present evidences of incipient crystallization, much more marked in the latter cell types. Electron micrographs of the filaments of fully sickled cells afford opportunity for study of hemoglobin-membrane relationships, measurement of surface-ultrastructure thickness as well as the mechanisms of the sickling process itself. Rouleaux formations of otherwise normal erythrocytes occasionally present micrographs of hemoglobin shrinkage away from the surface ultrastructure permitting direct measurement of the thickness of the surface ultrastructure.

THE GOLDEN YEARS

Out of every 100 men and women over 65—

34 are still working for a living

22 are dependent on public assistance

17 are cared for by relatives, friends or private charities

13 live on savings

11 are supported by social security and other public retirement plans

3 receive their chief support from private retirement systems

—From a report to Congress on "Issues in Social Security."

EXFOLIATIVE CYTOLOGY IN PERIODICAL PHYSICAL EXAMINATION

(Continued from Page 321)

4. Foot, N. C., and Papanicolaou, G. N.: Early renal carcinoma in situ. J.A.M.A., 139:356, (Feb. 5) 1949.
5. Fremont-Smith, M.; Graham, R. M., and Meigs, J. V.: Cytologic method in the diagnosis of cancer. New England J. Med., 238:179, (Feb. 5) 1948.
6. Fremont-Smith, M.; Graham, R. M., and Meigs, J. V.: Vaginal smears as aid in diagnosis of early carcinoma of cervix. New England J. Med., 237:302, 1947.
7. Hauptmann, E.: Cytologic features of carcinomas as studied by direct smears. Am. J. Path., 24:1199, (Nov.) 1948.
8. Herbut, P. A., and Lubin, E. N.: Cancer cells in prostatic secretion. J.A.M.A., 135:136, (Sept. 20) 1947.
9. Jones, C. A.; Neustaeder, T., and Mackenzie, L. L.: The value of vaginal smears in the diagnosis of early malignancy. Am. J. Obst. & Gynec., 49:159, 1945.
10. Lombard, H. L.; Middleton, M.; Warren, S., and Gates, O.: Use of the vaginal smear as a screening test. New England J. Med., 239.317, (Aug. 26) 1948.
11. McCandless, F. D., and Faloon, W. W.: Diagnosis of metastatic tumor by cytological examination of pericardial fluid. Ann. Int. Med., 29:1157, (Dec.) 1948.
12. Mackenzie, L. L.; Welchler, B. B.; Dubois, J. C., and Neustaeder, T.: Use of the vaginal smear in a gynecological series. Am. J. Obst. & Gynec., 55:821, 1948.
13. Meigs, J. V.; Graham, R. M.; Fremont-Smith, M.; Kapnick, J., and Pawson, R. W.: Value of the vaginal smear in diagnosis of uterine cancer. Surg. Gynec. & Obst., 77:449, 1943.
14. Papanicolaou, G. N.: New cancer diagnosis. Proc. Third Race Betterment, p. 528, 1928.
15. Papanicolaou, G. N.: A new procedure for staining vaginal smears. Science 95:438-439, (Apr. 24) 1942.
16. Papanicolaou, G. N., and Traut, N. F.: Diagnosis of the uterine cancer by vaginal smear. Commonwealth Fund, 1943.
17. Papanicolaou, G. N., and Marshall, V. F.: Urine sediment smears as a diagnostic procedure in cancers of the urinary tract. Science, 101:519, (May 18) 1945.
18. Papanicolaou, G. N.: Diagnostic value of exfoliated cells from cancerous tissues. J.A.M.A., 131:372, (June 1) 1946.
19. Pollard, H. M.; Bryant, N. C.; Black, M., and Hall, W. C.: Diagnosis of gastric neoplasms. J.A.M.A., 139:71, (Jan. 8) 1949.
20. Sanders, W. R.: Cancer of the bladder. Edinberg M. J., 1:273, 1864.
21. Scheffey, L. C.; Rakoff, A. E., and Hoffman, J.: An evaluation of the vaginal smear method for the diagnosis of uterine cancer. Am. J. Obst. & Gynec., 55:453, (March) 1948.
22. Shushan, R. M.: Cytologic smears in diagnosis of cancer. New Orleans M. & S. J., 101:108, (Sept.) 1948.
23. Vogel, M. T.; McGavack, I. H., and Kammandel, H.: The urethral smear in the normal human male. J. Clin. Endocrinol., 8:967, (Nov.) 1948.
24. Wiles, F. B., and Hellwig, A.: Evaluation of Papanicolaou's method of cancer diagnosis. Am. J. Clin. Path., 18:283, (Apr.) 1948.
25. Woolner, L. B., and McDonald, J. R.: Diagnosis of carcinoma of the lung. J.A.M.A., 139:497, (Feb. 19) 1949.

CANCER IN THE JEWISH RACE

(Continued from Page 334)

7. Ewing: Neoplastic Disease, 4th ed., p. 944. Philadelphia: W. B. Saunders Co., 1940.
8. Fourneir: Bul. de l'Acad. de Med., 56:3 series, 464-478, 1906.
9. Hand, E. A.: Arch. Dermat. & Syph., (to be published in 1949).
10. Hoffman, F. L.: Am. J. Cancer, 17:142, (Jan.) 1932.
11. Horwitz, A.: Surg. Gynec. & Obst., 44:355, (March) 1927.
12. Ney, C., and Moody, H. C.: Personal communications.
13. Ravich, A.: J. Urol., 48:298, (Sept.) 1942.
14. Theilhaber, F.: Ztschr. f. Krebsforsch., 8:466, 1910.
15. Vineberg, H. N.: J. Mt. Sinai Hosp., 10:33.
16. Weiner, L., and Polduan: New England J. Med., 208-407, (Feb. 23) 1933.
17. Wolbarst, A. L.: Lancet, 1:150, (Jan. 16) 1932.

The proposals for socialized medicine now before Congress seek the nationalization of American medicine down to the last bottle of aspirin, with Washington in complete direction and control of every hospital, every medical school, every research laboratory, every physician, every dentist, every nurse, and every hospital technician in the land.—L. C. Arends, M.C., Illinois.

Medical Ethics

So long as the primary responsibility of the physician is to his patient and his own conscience, medical ethics will continue to be an important topic. Although it is impossible even to mention all facets in a brief note of this sort, an objective commentary on medical problems can hardly avoid some phase of the subject.

Perhaps most difficult among the major ethical problems facing every doctor today is his economic relationship to the patient. In this era of high demand for medical service and low doctor-per-capita ratio, commercialization of medical practice is absurdly easy and undoubtedly tempting to certain individuals. It speaks well of general medical ethics that actual instances are relatively few. After at least eleven years of expensive full-time education, great responsibility, and uncertain, arduous business hours, every doctor is entitled to a comfortable living for himself and family. But, unfortunately or otherwise, medical practice is still sufficiently a humanitarian service that the doctor is entitled to nothing more. And a present probability exists that public opinion may someday find opportunity to penalize the many for the overreaching of the few.

A second problem concerns dissemination of professional problems and attitudes to the public. At first impression it might seem that the doctor has too important a task in medical service to lend his amateur efforts to public education. But unfortunately large segments of the public are at once misinformed and uninformed concerning the function of the doctor in modern society. Within the medical profession alone is the experience and understanding requisite to adequate reeducation. An "ivory tower" attitude is just not in accord with the necessities of modern medical practice.

One major problem, however, is noteworthy for the considerable present progress toward its solution. This problem involves the continual personal re-education required if the doctor is to "keep current" with constant additions to medical knowledge. The success of such programs as the recent Michigan Postgraduate Institute attests that the average doctor is squarely facing this problem. We believe our profession capable of meeting all other problems as well.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

POSTGRADUATE CONTINUATION COURSES

Wayne University College of Medicine

March 13-June 10, 1950

These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the G.I. Bill, should make arrangements for tuition and books, as provided by the G.I. Bill, by presenting these Certificates of Eligibility to Mr. Arthur Johnson, Veterans Administrator at Wayne University, 5001 Second.

If you do not possess a Certificate of Eligibility, please call Mr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers it is necessary to bring with you. *This must be completed before you register.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, *before March 11.*

Title of Course	*Place*	*Time*	*Fee*
	Anatomy		
Surgical Anatomy (Second half)	College of Medicine	Tuesday 3-5	$35.00
Regional Anatomy			
Trunk	College of Medicine	Wednesday 1-5	$50.00
Back & Extremities	College of Medicine	Thursday 1-5	$50.00
Head and Neck	College of Medicine	Friday 1-5	$50.00
	Bacteriology		
Parasitology	College of Medicine	Friday 1-4	$35.00
	Pathology		
Gynecologic Pathology (Limit 50)	College of Medicine	Wednesday 1-5	$50.00
Advanced Hematology (Limit 5)	College of Medicine	Monday 1-5	$50.00
	Physiological Chemistry		
Seminar in P. Chemistry	College of Medicine	Thursday 3:30-4:30	$15.00
Physical Biochemistry	College of Medicine	Weds. & Fri. 2-3	$25.00
Nutrition	College of Medicine	M. W. F. 11-12	$35.00
Quantitative Methods & Metabolism	College of Medicine	M. W. F. 8-12	$75.00
	Dermatology		
Seminar in Dermatology	Receiving Hospital	Wed. 10-11:30	$15.00
Seminar in Dermopathology	College of Medicine	Tuesday 11-12	$15.00
Conference on Venereal Diseases	Social Hygiene Clinic	Thursday 1-2:30	$15.00
Deep Mycoses	Receiving Hospital (4th fl., Mycology Lab.)	Thursday 10:30-12	$30.00
	Internal Medicine		
Medical Seminar	Receiving Hospital	Thursday 6:30-7:30	$15.00
Medical Conference	Receiving Hospital	Saturday 11-12:30	$15.00
Gastroenterology (Limit 10)	Receiving Hospital	Saturday 8-9	$15.00
Medical X-Ray Conference (Limit 10)	Receiving Hospital	Tuesday 11-12	$15.00
	Surgery		
Surgery Seminar (Limit 20)	College of Medicine	Monday 4-5	$15.00

Editorial

THE REAL ISSUE IS SOCIALISM

THE JANUARY and February issues of some of our national magazines, and also our medical press have articles and editorials on that subject stressing the fact that we are facing a real national problem of socialism, rather than just the socialism of medicine. They especially carry the good news that others are now joining with the medical profession in an effort to retain for the American people the status of individualism. We are happy that other editors are inviting the attention of their readers to the real issue.

The socialism issue was recognized by the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY long ago when we said editorially (and in italics) in October, 1943, page 826, "Other nations have gone through this socialization of their governmental structure and have found the most effective method of accomplishing that end has been through medical service to the people. History shows it has always been the first step to general socialism." Michigan has been opposing the socialism scheme on many occasions since "the rising tide of threats against the freedom of American principle is spearheaded by proposals for governmental health insurance." (JMSMS, February, 1946, page 216.)

The number of those who recognize the course and implications of the policies our government is following is increasing rapidly. This possibly accounts for the continued and spreading propaganda for the social state, or welfare state. Can it be that the bureaucrats and social planners foresee that their cause is actually losing among the progressive and substantial people of the country, and are making a desperate effort? Special interest groups are beginning to appreciate that the problem today is not socialism of agriculture, utilities, medicine, or any one single field.

One-third of our national production and income has been socialized by taxation, one-third by bureaucratic orders, licenses, price fixing subsidies and outright controls. Less than one-third of our economy is free. We have already gone too far, and the job before us is staggering, but let's get going.

The real issue is Socialism.

A DEFINITE THREAT

OUR MOST dangerous enemy is the bureaucrat or do-gooder who assumes the role of leader, who denies that he is a socialist, and who works behind a smoke screen which he calls National Planning. The social planners have already taken us far down the road which has been the pathway of so many European nations to their regret. Unless we can recognize these individuals for what they are, and can stop them, they will also destroy this country. Their present offering is "security" for the individual or group, but a security which involves too much control, too much surrender of liberty.

John T. Flynn in his latest best-seller, "The Road Ahead" tells of the two great European countries which have become socialist. "Each adopted socialism by a different route. . . . Russia was conquered overnight by a sudden, violent, revolutionary convulsion. Great Britain moved into socialism a little at a time, without bloodshed, in a journey that took almost forty years." We are following Great Britain, and we are much farther along the road than we suspect. They began by advocating a Welfare State.

The British Socialist Prophets of Abundance and Security (the same as ours) have been in power four years and it is finally dawning on the British people that the realities do not correspond to the rosy promises. Britain has "nationalized" about 25 per cent of her economic processes, but she has "socialized" almost the entire system. The government has nationalized the following: The Bank of England (credit); cables and wireless (the overseas communications system); civil aviation; railways, bus transport and inland waterways; coal mines; electricity; the gas industry; medical services.

This socialistic system is able to go on only because it receives untold billions in aid from private enterprise America. The socialists' great hold on the people is because of the social service they promise the people, and which they provide from the cradle to the grave. These services include all medical services, hospital services, old age retirement payments, unemployment pay and allowances for widows and orphans.

Men between the ages of eighteen and fifty, and women between the ages of eighteen and forty cannot change occupations at will, for the Minister of Labor has the power to direct workers to the employment he considers for the best national interest. That power is essential in the controlled economy of the Welfare State.

America is now threatened with this same type of socialism, and just as it fastened itself on Great Britain by a devious movement not called socialism, so it is being fostered in America by persons and organizations who abhor the word "socialism."

THE BRITISH PICTURE—NOT FOR US

SOCIALIZED MEDICINE as it is now working in Great Britain is described in three articles now appearing in *Reader's Digest*. Harold E. Stassen, President of the University of Pennsylvania and former Governor of Minnesota, tells of his findings on a trip to England and Europe to study the compulsory health system. His article "Never! Never! Never!" is in the January, 1950, number. In February appears "Granny is Gone," and a third will appear in March. Mr. Stassen says the breakdown of hospital and medical care for the aged is probably the principal cause for the startling increase in Britain's death rate for the first quarter of 1949—a rise from 123 to 150 per 10,000 over the corresponding quarter of 1948 before the compulsory system became general.

The hospitals are swamped. They are crowded, with over 200,000 on the waiting list, and 50,000 beds idle because of shortage of nurses and other personnel under government operation. The total amount of surgery is actually decreased in spite of the government paying the bill. Emergency cases cannot get into the hospitals, so it is not surprising that others needing corrective surgery, or attention that is not urgent but is important to good health, are not cared for.

Mr. Stassen tells of his conversation with a good surgeon who in his younger days "traded work" with a man whose wife needed obstetric services, but who not having any money built and painted a fence in exchange for his wife's care. That man became a great friend of his doctor, and being an independent individual made his success in the industrial world. Could that happen now? The doctor told Mr. Stassen "what makes me uneasy is whether self-reliance and leadership will continue when personal responsibilities are reduced—when the state takes a man's earnings and spends the money doing things for him."

No one can measure the effects on character. They are intangible and indirect, but already there are signs of an unfortunate effect upon the British medical profession itself. Since 1948 there has occurred a slight decrease in the number of young men studying medicine, and this at a time when the need is even greater. Some of the more ambitious practitioners are making plans to leave the country. Some have gone.

Mr. Stassen tells of restrictions in the matter of selecting a place to practice. A young man may select a place, but he must be approved by the others in the locality. The earnings are restricted by the provisions of control, and the regulations of the ministry. There are also restrictions which would severely limit the independence of judgment which has characterized the profession through the generations. One London doctor told Mr. Stassen, "I believe this system is here to stay; I therefore have nothing whatever to say for it or against it."

Every doctor should read these articles by Mr. Stassen. He will be edified, but also filled with anxiety for what might be.

GOOD PUBLICITY

IN TWO SUCCEEDING numbers *Collier's* magazine has published remarkable articles which every doctor of medicine should read. "Mr. Welfare State Himself," "Washington's best hated bureaucrat since Harry Hopkins has ambitious plans for himself and the U.S.A." This article gives the alpha and omega of Oscar Ewing. It tells how Ewing set about to gain control of government through certain associations and activities. It tells of his Round Table, or Privy Council. It tells of his using in his own office a $3,225-a-year chief cook from St. Elizabeth's Hospital. It tells of Ewing's summary ousting of Dr. Thomas Parran, as Surgeon General of the U. S. Public Health Service. The Ewing, McNutt, Wilkie group of former classmates met disaster when Ewing changed political affiliations for personal advancement.

This article appeared in the February 4, 1950, number of *Collier's*. Mr. Ewing's political aspirations, ambitions, and the extent to which he will sacrifice friends and principles to accomplish that ambition are well told. "The Senate has decided that there's a suspicious character at large in

Washington, a bureaucratic dictator, a brass-lunged advance agent of the galloping Welfare State."

The second article, "The Doctor Brushed Off Utopia," February 11, 1950, is about a British doctor who is now interning to get into practice in the United States. Ralph Jocelyn Gambell, M.D., left his practice in England because of the socializing handicaps of free practice. He spoke to a group at the AMA meeting in Atlantic City in June, 1949, and at various other places. This article tells his story well and dramatically. *Collier's*, by these two articles, is rendering a great aid to the fight against socialism.

GENERAL PRACTICE

THE PRE-PUBLICATION special issue of *General Practice* published by the American Academy of General Practice foretells a very promising addition to the field of medical journalism.

There are 128 pages and cover, printed on heavy gloss paper. It contains five good original articles. An editorial department precedes the papers. A very interesting Secretary's newsletter, typewritten with a vari-typer, is tipped in, in color. A page of notes on this month's authors; a page of letters from readers; a section on current journal reviews; a question-and-answer section called "Information Please"; Therapeutic conferences; an ambitious section on Business and Economics; a page on government medicine in the light of Hoover Commission; report by J. S. DeTar, M.D., of Milan, Michigan; the book review department; Academy reports and chapter news; postgraduate courses and coming meetings, and a section "After Hours," in which hobbies are stressed.

There is listed an Advisory and Consultant Board which contains a number of Michigan names: George Waldbott, M.D., Detroit, Allergy; Cyrus C. Sturgis, M.D., Ann Arbor, Hematology; Frederick A. Coller, M.D., Ann Arbor, General Surgery; William M. Tuttle, M.D., Detroit, Thoracic Surgery; James L. Wilson, M.D., Ann Arbor, Pediatrics; Clarence D. Selby, M.D., Detroit-Ann Arbor, Industrial Medicine; D. E. Waggoner, Ph.D., Ann Arbor, Preventive Medicine, Public Health and Statistics; Reuben K. Kahn, Ph.D., Ann Arbor, Laboratory Medicine.

We are happy to welcome this Journal. We know it will have an impressive influence in welding together and strengthening the Academy of General Practice. We congratulate the retiring President, E. C. Texter, M.D., of Detroit, on the accomplishment of his presidential year.

AMA DUES AND THE PUBLIC

ON ACCOUNT of the action of the American Medical Association at the Interim Session at Washington, D. C., in December in establishing dues for the members to pay, the Association has been held up to ridicule by our detractors and the propagandists who are promoting socialization of the country. Therefore, it is a real pleasure to find someone with vision and understanding.

Mr. Joseph Christensen, of the Progressive Cafeterias of Chicago, recently wrote as follows to Earnest E. Irons, M.D., President of the American Medical Society: "I cannot put M.D. after my name, but I can, at least for a while, still put U.S.A. As a consequence please accept the enclosed check for $25.00 as a slight token of regard for my doctor and all his colleagues. These are my "dues" as a citizen, and I hope they will help in your fight against socialized medicine. "A people without guts are soon a nation without guts, and if it should become necessary to remove any part of mine, I want to pick my man and pay his charge without a precinct captain getting his nose in my anatomy."

PERTINENT CANCER PROBLEMS

THERE HAS been no abatement of the public interest in cancer during the past year. In some respects, public interest has heightened—especially in the desire for periodic examination of apparently healthy persons to detect cancer in early and curable stages.

An increasing number of state and local medical organizations are developing plans for making every physician's office a cancer detection center. The most notable of these plans—The Hillsdale Plan for Tumor Detection—is serving as the model for such programs throughout the nation.

The major responsibility for the success of any of these undertakings rests on the medical profession. Cancer is encountered in all fields of medical practice; therefore all physicians are concerned. Cancer in younger age periods is assuming greater importance so its occurrence at any age cannot be overlooked. Assumptions that "it can't be cancer" because of age or other factors are entirely unwar-

ranted and misleading and may have disastrous consequences.

Education remains one of the most potent forces for the control of cancer. It should stand on equal footing with early diagnosis and treatment as a control measure. It should be a never-ending process. As new generations mature, some of whose members carry a false and fantastic mental picture of cancer, education becomes essential for the development of sensible attitudes toward this problem. Much of the increase in lives saved in recent years has been due to the active and continuing lay and professional education programs.

Emphasis on service to the cancer patient, despite its great humanitarian appeal to many people, does little or nothing to advance the control of cancer. Much of the money now devoted to this phase of the cancer problem would provide far greater returns in lives saved if spent on constructive educational projects, especially in the high school age group. Education saves lives. Service to the patient with cancer simply makes his remaining days as comfortable as possible. Early diagnosis continues to offer the greatest hope for the control of cancer.

The research program, financed in large measure by American Cancer Society funds, extends into many scientific fields. With increasing frequency, new diagnostic and treatment methods are reported in the public press. Some of these reports are based on a minimum of data and indicate prematurity of conclusion and lack of the adequate controls necessary for proper evaluation. Such reports often raise false hopes in the public mind, and especially in the minds of cancer patients and their families. To this extent, their contribution to the solution of the cancer problem is of doubtful value. There is a considerable amount of optimism to be derived from the application of scientifically accepted information about the diagnosis and treatment of cancer. Doubt regarding the value of accepted methods of therapy should not be encouraged by the premature publicity about new methods which must have more extensive trial before their real value can be determined.

The best service that can be rendered at this time toward the control of cancer in any community is to realize that any patient, regardless of age, can have cancer; that many cancers are found by alertness on the physician's part; that early diagnosis offers the greatest chance for cure; and that education is the most constructive force that can be applied in any community for an ultimate reduction in the number of lives lost from this disease.

THE BATTLE

Doctors are busy people. In New Zealand, Australia, and Great Britain they were too busy to be cohesive. They were oblivious to the ancient technic of Fabius, as were most of the other citizen-taxpayers. Result: Nationalization of essential services, among them medicine and its institutions.

It can happen here. We can have the Poorhouse State here, too. Since medicine is the principal point of attack, doctors will be wise to scrutinize the daily press and magazine articles appearing for the public, which are openly or overtly critical of medicine. We do not infer that medicine is beyond legitimate criticism; on the contrary, constructive criticism, based on provable facts, is to be welcomed. But there is a point, difficult to define exactly, where criticism becomes attack. Careful chronologic examination of pertinent data before and since 1930 will disclose the changing character of the stridor and the progressive increase in volume. In more recent years public hearings, for example on the various Federal bills calling for national compulsory health insurance, have provided a sounding board for the aggressor to organize the forces of discontent, to convert the impact of what might have been useful and constructive criticism of medicine and doctors for the public benefit into a subtle type of guerilla warfare, directed now here now there, a show of force following the revolutionary technic well understood in the socialist Poorhouse States of Europe. So scattered have the assaults been upon a busy profession as in many instances to escape notice!

If the forces of aggression press battle upon the medical profession they will get it, even upon the unequal terms of the millions which the profession can raise by taxing themselves as against the billions that can be marshalled against our campaign of public education by general taxation of the public, the poor, the working man and woman, the doctor, the lawyer, the employed veteran, the businessman, the corporation, the civil servant, the members of the armed forces, the vanishing rich, and the chimerical "selfish interests."—Excerpts from Editorial, *New York State Journal of Medicine,* Feb. 15, 1950.

Annual Session of The Council

January 20-21, 1950

HIGHLIGHTS OF THE COUNCIL

- **Auditors' (Ernst & Ernst) report for 1949, and budgets for 1950 approved (see pages 358-362).**
- **Annual Reports of Secretary, Treasurer, Editor, and three Standing Committees of The Council accepted.**
- **Secretary L. Fernald Foster, M.D., Treasurer A. S. Brunk, M.D., and Editor Wilfrid Haughey, M.D., re-elected.**
- **Progress report on Michigan Medical Service by R. L. Novy, M.D., Detroit.**
- **Official report of MSMS Delegates to the American Medical Association—on Washington, D. C., mid-winter session—accepted.**
- **Progress report on Michigan Health Council presented by MHC President A. S. Brunk, M.D.**
- **Report on 1949 Michigan Rural Health Conference presented by E. I. Carr, M.D., who advised that the 1950 Michigan Rural Health Conference would again be sponsored financially by the Michigan Foundation for Medical and Health Education, Inc. (of which Dr. Carr is President).**
- **Committee reports were presented by the Permanent Conference Committee, Liaison Committee with Michigan Hospital Association, Special Committee on Education, Committee on Increase of Number of Graduates from Medical Schools, Committee on Medical Socio-Economic Courses in Michigan's Medical Schools, Commission on Healing Arts, Venereal Disease Control Committee, Postgraduate Medical Education Committee, Committee to Study Health Plans, Preventive Medicine Committee, Rural Medical Service Committee, Mental Hygiene Committee.**
- **Monthly reports of President W. E. Barstow, M.D., President Elect C. E. Umphrey, M.D., Secretary L. Fernald Foster, M.D., Legal Counsel J. Joseph Herbert, and Public Relations Counsel H. W. Brenneman accepted.**
- **Report on voluntary health organizations in Michigan was presented by Carleton Dean, M.D., of the MCCC.**
- **Monthly report of Rheumatic Fever Program Co-ordinator Leon DeVel, M.D., was presented and accepted.**
- **Annual Progress Reports of individual Councilors on condition of profession in each District were presented.**

SECRETARY'S ANNUAL REPORT—1949

To The Council of the MSMS:

I herewith submit the report of the Secretary for the year 1949.

Membership

The Michigan State Medical Society membership for 1949 showed a total of 4,971 members, including 188 Emeritus and Life members, 13 Retired members and 67 Associate members. The total paid membership was 4,789 with net dues of $48,867.00. The 1949 membership was at the highest peak in the history of the society. The number of members with unpaid dues for 1949 was 137.

Deaths During 1949

We regretfully record the deaths of the following eighty-six members during 1949:

Barry—Kenneth S. McIntyre, M.D., Hastings.
Bay-Arenac-Iosco—John A. Keho, M.D., Bay City.
Berrien—Frank K. Belsley, M.D., Benton Harbor.
Calhoun—Bertha Loveland Selmon, M.D., Battle Creek; Franklin R. Walters, M.D., Battle Creek.
Genesee—Harry A. Jefferson, M.D., Flint.
Gratiot-Isabella-Clare—Thomas J. Carney, M.D., Alma.
Hillsdale—Burt F. Green, M.D., Hillsdale.
Houghton-Baraga-Keeweenaw—D. K. MacQueen, M.D., Laurium, and A. C. Roche, M.D., Calumet.
Ingham—Harold A. Miller, M.D., Lansing; Gertrude O'Sullivan, M.D., Mason; Thomas M. Sanford, M.D., Lansing; Lillian R. Smith, M.D., Lansing.
Jackson—Harold Lee Hurley, M.D., Jackson, and William W. Lathrop, M.D., Jackson.
Kalamazoo—Leslie H. S. DeWitt, M.D., Kalamazoo; Byron Farwell, M.D., Kalamazoo; Albert E. Henwood, M.D., Kalamazoo; Roscoe F. Snyder, M.D., Kalamazoo.
Kent—Corda Earl Beeman, M.D., Grand Rapids; Theron W. Hammond, M.D., Grand Rapids; Henry Hulst, M.D., Grand Rapids; Thomas R. Kemmer, M.D., Grand Rapids; Pius L. Thompson, M.D., Grand Rapids.
Lapeer—H. M. Best, M.D., Lapeer.
Lenawee—F. J. McCue, M.D., Adrian; Leo J. Stafford, M.D., Adrian.
Manistee—Henry M. Quinn, M.D., Copemish.
Marquette-Alger—Jacob Talso, M.D., Ishpeming.

Mason—Victor J. Blanchette, M.D., Scottville; Ivan L. Hunt, M.D., Scottville.

Muskegon—Clement Francis Derezinski, M.D., Muskegon; A. F. Harrington, M.D., Muskegon; Fred N. Morford, M.D., Muskegon; Antoine S. Petkus, M.D., Muskegon.

North Central Counties—George Adam Drescher, M.D., Lewiston.

Northern Michigan—F. H. Lashmet, M.D., Petoskey.

Oakland—Kenneth E. Blair, M.D., Pontiac; Martha S. Cottrell, M.D., Novi.

Oceana—Norman W. Heysett, M.D., Hart, Michigan.

Ontonagon—Edwin J. Evans, M.D., Ontonagon.

Saginaw—David E. Bagshaw, M.D., Saginaw.

St. Clair—James Arthur Attridge, M.D., Port Huron; Jacob H. Burley, M.D., Port Huron; Thomas E. DeGurse, M.D., Marine City; George Waters, M.D., Port Huron.

Shiawassee—H. A. Hume, M.D., Owosso.

Washtenaw—Harry B. Britton, M.D., Ypsilanti; Max M. Peet, M.D., Ann Arbor; August Karl Zinn, M.D., Ypsilanti.

Wayne—Philip R. Appel, M.D., Detroit; Arthur F. Boell, M.D., Grosse Pointe Park; Russell G. Brando, M.D., Detroit; Jacob H. Chalat, M.D., Detroit; Howard R. Coll, M.D., Highland Park; Walter J. Cree, M.D., Detroit; Hampton P. Cushman, M.D., Detroit; Arthur P. Derby, M.D., Detroit; Bruce Douglas, M.D., Detroit; Alex V. Forrester, M.D., Detroit; Eldred E. Fraser, M.D., Detroit; Joseph D. Goldsmith, M.D., Detroit; Thomas K. Gruber, M.D., Eloise; Joseph A. Haluska, M.D., Detroit; Albert A. Hughes, M.D., Detroit; Stanley W. Insley, M.D., Detroit; Richard A. James, M.D., Detroit; Armand Kersten, M.D., Detroit; Paul H. Lippold, M.D., Detroit; Archibald D. McAlpine, M.D., Detroit; Crawford W. McCormick, M.D., Detroit; Morey D. Miro, M.D., Detroit; Oscar Nagel, M.D., Detroit; Arthur J. Neumann, M.D., Detroit; James T. O'Hora, M.D., Detroit; Edward J. Panzner, M.D., Detroit; George L. Renaud, M.D., Detroit; William F. Shannon, M.D., Detroit; Robert G. Shaw, M.D., Detroit; Harold K. Shawan, M.D., Detroit; J. Walter Vaughan, M.D., Detroit; Adolph E. Voegelin, M.D., Detroit; Dudley B. Waltz, M.D., Detroit; Norman L. Woodry, M.D., Detroit.

Wexford—Edwin A. McManus, M.D., Mesick.

County Medical Society	PAID 1948	PAID 1949	SPECIAL MEMBER Emer.	SPECIAL MEMBER Life	SPECIAL MEMBER Retd.	SPECIAL MEMBER Assoc. Military	DEATHS 1948	DEATHS 1949	NET MEMBERSHIP Close 1948	NET MEMBERSHIP Close 1949	1949 Gain	1949 Loss	UNPAID 1948	UNPAID 1949
Allegan	24	20	—	3	—	—	—	—	24	23	—	1	1	—
Alpena-Alcona-Presque Isle	19	21	—	1	—	—	2	—	19	22	3	—	—	—
Barry	12	11	—	2	—	—	—	1	15	12	—	3	—	—
Bay, Arenac, Iosco	63	69	—	—	—	—	—	—	20	20	—	—	—	—
Berrien	69	74	3	5	1	—	2	1	73	77	4	—	1	1
Branch	20	19	2	—	—	—	1	1	69	75	6	—	2	2
Calhoun	98	101	—	1	—	—	—	—	20	20	—	—	—	—
Cass	11	10	—	5	1	4	2	2	118	109	—	9	2	7
Chippewa-Mackinac	23	23	—	—	—	—	1	—	11	10	—	1	—	1
Clinton	10	16	1	—	—	—	1	—	24	24	—	—	—	1
Delta-Schoolcraft	26	22	—	—	—	—	1	—	10	16	6	—	1	—
Dickinson-Iron	18	18	2	—	—	—	—	—	27	24	—	3	—	3
Eaton	15	16	—	—	—	—	—	—	18	18	—	—	—	1
Genesee	187	187	—	—	—	—	1	—	15	16	1	—	1	—
Gogebic	19	19	3	11	1	—	3	1	199	201	2	—	2	2
Gd. Traverse-Leelanau-Benzie	48	46	—	—	—	—	1	—	19	19	—	—	—	—
Gratiot-Isabella-Clare	39	39	—	1	—	—	2	—	49	47	—	2	1	2
Hillsdale	19	19	2	—	—	—	1	1	41	40	—	1	—	3
Houghton-Baraga-Keeweenaw	28	28	—	2	—	—	—	1	22	20	—	2	—	2
Huron	13	15	3	2	—	—	1	2	33	31	—	2	1	—
Ingham	154	172	1	1	—	—	1	—	14	16	2	—	2	1
Ionia-Montcalm	33	36	—	2	3	—	1	4	162	174	12	—	3	—
Jackson	101	102	3	3	—	—	3	—	37	39	2	—	1	—
Kalamazoo	114	136	3	4	—	1	2	2	111	108	—	3	—	—
Kent	267	281	5	7	1	—	3	4	126	143	17	—	—	—
Lapeer	13	13	3	12	1	5	3	5	292	299	7	—	7	3
Lenawee	44	41	—	—	—	—	1	1	16	15	—	1	—	1
Livingston	17	18	2	2	—	—	2	2	45	43	—	2	—	1
Luce	6	6	—	—	—	—	—	—	18	18	—	—	—	2
Macomb	45	48	1	—	—	—	—	—	6	7	1	—	2	—
Manistee	13	13	—	1	—	—	1	—	46	49	3	—	—	—
Marquette-Alger	38	42	1	—	—	—	1	1	14	13	—	1	—	1
Mason	13	12	—	2	—	—	—	1	41	43	2	—	4	—
Mecosta-Osceola-Lake	14	15	—	—	—	—	—	2	13	10	—	3	—	—
Menominee	13	17	1	1	—	—	1	—	15	17	2	—	—	—
Midland	19	21	1	—	—	—	—	—	15	18	3	—	1	—
Monroe	32	37	—	—	—	—	—	—	19	21	2	—	1	—
Muskegon	84	94	2	—	—	—	—	—	33	39	6	—	1	—
Newaygo	10	10	1	—	—	2	—	4	87	93	6	—	—	3
North Central Counties	15	20	—	—	—	—	—	—	10	10	—	—	—	—
Northern Michigan	30	32	—	—	1	—	—	1	15	20	5	—	—	—
Oakland	166	184	1	—	—	—	3	1	31	32	1	—	4	1
Oceana	7	8	1	3	1	—	3	2	168	187	19	—	4	3
Ontonagon	4	6	2	—	1	—	—	1	10	10	—	—	—	—
Ottawa	34	34	—	—	—	—	—	1	4	5	1	—	—	—
Saginaw	106	109	1	2	—	1	—	—	36	38	2	—	—	—
St. Clair	55	55	3	5	1	—	—	1	115	117	2	—	1	3
St. Joseph	27	25	—	—	—	—	1	4	57	51	—	6	2	1
Sanilac	14	12	—	—	—	—	—	—	27	25	—	2	—	—
Shiawassee	25	21	—	—	—	—	—	—	14	12	—	2	—	—
Tuscola	21	22	1	—	—	—	—	1	26	21	—	5	—	2
Van Buren	21	21	1	—	—	—	1	—	22	23	1	—	—	—
Washtenaw	187	174	4	—	—	—	—	—	25	25	—	—	—	—
Wayne	2,139	2,157	1	3	—	51	3	3	262	226	—	36	5	23
Wexford-Missaukee	21	22	20	32	1	3	23	34	2,201	1,179	—	22	35	67
			—	—	—	—	1	1	21	21	—	—	—	—
TOTALS	4,663	4,789	75	113	13	67	73	86	4,960	4,971	118	107	86	137

Journal

The following information relative to the finances of THE JOURNAL is found in the annual audit report of Ernst and Ernst:

Income was $58,217.57 which is $8,717.57 over the tentative budget for 1949.

Expenses were $52,222.43 which were $2,722.43 over the budgetary estimate.

This indicates a net JOURNAL income of $5,995.14.

THE JOURNAL of the Michigan State Medical Society has been published each month under the direction of the Publication Committee of the Michigan State Medical Society. THE JOURNAL has continued to follow the policy, not only of presenting outstanding scientific papers and especially the papers presented at both the Annual Session in September and the Michigan Postgraduate Clinical Institute in March but many manuscripts presented at local societies and others of advanced scientific attainment.

THE JOURNAL has published material to keep the membership informed concerning the socio-economic problems of medicine. It has opposed the program for national socialism which is taking principal form in the effort to socialize medicine. The editorial policy has been directed chiefly to that issue. Items of special interest to our members have been used with quotations and editorial comments along the line of our greatest interest.

JMSMS has continued the policy of making the covers really distinctive in that they emphasize some of the major activities of the Society. The April number was devoted to Cancer with a special cover stressing the fight against this disease. The May issue honored the member selected as Michigan's Foremost Family Physician, to be especially congratulated for his attainments. The June number was devoted to Michigan Medical Service. The July number contained, in addition to the roster of the Michigan State Medical Society, a list of the Women's Auxiliary membership, published for the first time. The August number was devoted largely to the Annual Session. The September issue featured Rheumatic Fever. The October number was devoted to Michigan Foundation for Medical and Health Education. The November issue featured Tuberculosis; and the December issue was devoted to Heart Disease.

Since 1902, when THE JOURNAL was established, its first and most important function has been to carry to our members matters of special interest to them, both scientific and economic. The Publication Committee has endeavored to continue that program. The Council believes our members are as well informed as any group in the country; that being true, our efforts have been well rewarded.

Finances

An audit of the books of the Society was completed by Ernst and Ernst, certified public accountants as of December 23, 1949. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive office, 2020 Olds Tower, Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 70,652.74
Accounts Receivable	9,065.69
Securities	89,273.22
Total	$168,991.65
Liabilities:	
Accounts Payable	4,617.01
Unearned Income	8,790.00
Reserves	97,781.05
Surplus	57,803.59
Total	$168,991.65

From the *Income and Expense* statement we find that the total regular income of the Society for 1949 (to December 23) was $59,125.76 with total expenses of $73,285.66 indicating net expenses of $14,159.90, representative of the fact that the operating expenses of the general funds of the Society are not met by the income from regular dues, JOURNAL and interest.

A study of the Reserves of the society as of December 23, 1949, indicates balances as follows:

Public Education (General Activities)	$35,238.62
Public Education (Special Activities)	33,254.46
Rheumatic Fever	28,887.97
Lecture Grant	400.00
Expenses during 1949 from these reserves were as follows:	
Public Education (General Activities)	$81,386.38
Public Education (Special Activities)	66,745.54
Rheumatic Fever	21,962.03
Lecture Grant	100.00

1949 Annual Session

The 1949 Annual Session held in Grand Rapids in September showed a total registration of 2,329 which was an all-time high in attendance at an out-state meeting of the Michigan State Medical Society.

The General Assembly type of program with daily discussion conferences was continued as in recent years and brought to Michigan twenty-nine essayists.

The exhibit during this Annual Session was comprised of fifteen scientific exhibits and one hundred six Technical Exhibitors in one hundred thirty-four spaces. This was the largest exhibit in the history of the Michigan State Medical Society.

The policy of bringing to the Scientific Assembly out-of-state essaysists of national and international reputation was continued and no expense was spared in making the meetings as interesting and instructive as possible. In spite of the rapidly rising costs of operation a modest gross profit before proration of salaries accrued to the society from the Annual Session.

To the 106 technical exhibitors, the registrants showed their usual appreciation and gave them very generous attention.

1949 House of Delegates

The House of Delegates, in five sessions, transacted the legislative business of the Society with as much dispatch as possible consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

(1) Adopted Resolutions concerning:
   (a) Special assessment ($25) for 1950.
   (b) Proposed Reorganization of American Medical Association.
   (c) Uniform Policy in Polio Cases.
   (d) Testimonial to the late T. K. Gruber, M.D.
   (e) Appointment of Special Committee to Survey MSMS Councilor Districts.

(2) Took action on other matters as follows:
   (a) Disapproved Petition to create 19th Councilor District.
   (b) Discharged the State Veterans Affairs Committee.
   (c) Discharged the State Interprofessional Committee.

(3) Instructed The Council to appoint a study commission on The Healing Arts.

(4) Elected Wilfrid Haughey, M.D., Battle Creek, as "President for a Day."

(5) Elected 10 Emeritus Members
   38 Life Members
   66 Associate Members
   8 Retired Members
   1 Non-Resident Member

(6) Adopted Amendments to MSMS By-Laws, as follows:
   re Associate Membership for postgraduate students.
   re Voting Power of Vice-Speaker.
   re Councilor Districts in Wayne County.

Michigan Postgraduate Clinical Institute and Heart and Rheumatic Fever Day

This third annual scientific institute held under the sponsorship of the Michigan State Medical Society in cooperation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University College of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 23-24-25-26, 1949.

This Institute designed to provide a high type scientific program, encourage Michigan physicians to prepare presentations and to publicize Michigan as a medical center this year featured thirty-three Michigan doctors of medicine on the program and nineteen out of Michigan essayists.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 1,627 with physicians present from Michigan, all nearby states and Canada.

County Secretaries—Public Relations Conference

A Conference of County Secretaries and other officers and members of component county groups was held in Detroit on January 9, 1949. This all-day conference was attended by over 197 County Society Officers, County Society Public Relations Committee Chairmen, Members of the Michigan State Medical Society Council, Legislative Committee and Public Relations Committee and Officers of the Woman's Auxiliary.

This conference featured techniques of county society organization and operation, an exposition of the major activities of the State Society as related to the County Societies and information necessary for the development and maintenance of good public relations and public education.

Committees

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1949 the sixty-two committees of the Michigan State Medical Society held a total of eighty-seven meetings and practically every meeting was attended by one or both of your secretaries. A total of 526 fellow members in your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

Rheumatic Fever Program

This Society-sponsored program of consultation and diagnosis in the field of Rheumatic Fever demonstrates the voluntary approach in the field of preventive medicine. There are now operating or in the process of development over thirty centers in Michigan. The Michigan Society for Crippled Children and Adults, Inc., has continued its financial support of this program with the contribution of $6,000.00 and the newly created Michigan Heart Association contributed $32,515.72. Also this year saw another organization, the Michigan Chapter of the Arthritis and Rheumatism Foundation, take an active interest in this Rheumatic Fever program by the contribution of $4,500.00.

We must emphasize that the Rheumatic Fever program is a voluntary effort of the medical profession of this State, aided financially by three other voluntary groups, to demonstrate its ability to conduct successful programs in the field of Public Health; that it is an educational effort both for physicians and the public; that it is being viewed with interest and sometimes envy by other groups and agencies; and that if it fails for lack of support by the individual physicians and county medical societies of the state the medical profession will be open to ridicule and further attempts to bring into the doctors' control the remaining modern procedures of medical practice—(viz. Rheumatism, Arthritis, Cerebal Palsy, Epilepsy, et al.) will be impossible.

Michigan Heart Association

The rapidly increasing Rheumatic Fever Program developed the need of establishing a project to include studies and activities in other forms of Heart disease. The Council, in 1948, approved the formation of a Michigan Heart Association under the aegis of the State Society as an affiliate of the American Heart Association. This association is now in operation and will further broaden the scientific activities of the State Society.

Michigan Heart Association was incorporated as a non-profit organization in Michigan on February 17, 1949, with C. E. Wilson, Detroit, as Chairman of the Board; W. B. Cooksey, M.D., Detroit, President; and L. Fernald Foster, M.D., Bay City, Secretary; Leon De Vel, M.D., Executive Secretary. The Michigan Heart Association was recognized as an affiliate of the American Heart Association in May, 1949, and the new organization has as one of its important projects for the ensuing year, a joint sponsorship with MSMS and the Michigan Society for Crippled Children and Adults, Inc., of Michigan Rheumatic Fever Control Program.

Contacts with Governmental Agencies

During 1949 your Society maintained active and friendly contacts with many governmental agencies at local county, state and national levels. Included in these contacts were:

The Governor of Michigan
The Michigan Crippled Children Commission
The State Board of Registration in Michigan
The Basic Science Board
The State Department of Public Instruction
The University of Michigan
The Michigan State College
Wayne University
Federal Hospital Survey and Construction Administration
The U. S. Senators and Congressmen from Michigan
The State Health Commissioner
The Michigan Mental Health Commission

Contacts with Non-Governmental Agencies

During 1949 the usual active contacts were maintained with many non-governmental agencies—especially

Michigan Medical Service
Michigan Hospital Service
Michigan Society for Crippled Children and Adults, Inc.
Michigan Health Council
The State Associations of
  Nursing
  Pharmacy
  Dentistry
The State Tuberculosis Association
The Michigan Foundation for Medical and Health Education
The Michigan Heart Association
The Rural Health Conference and its 49 other groups
The National Foundation for Infantile Paralysis

National Associations contacted in various ways during the past year were:

American Cancer Society
American Red Cross
  Particularly in connection with the Blood Bank Program

National Conference on Medical Service
Conference of Presidents and Other Officers of State Medical Associations
Associated Postgraduate Committee

Distinguished Health Service Awards

The third series of awards was made in 1949 to:
Mrs. Hall Blanchard, Jackson, Michigan
Mr. Burton Laraway, Jackson, Michigan
Mr. Carl M. Saunders, Jackson, Michigan
Mr. W. K. Kellogg, Battle Creek, Michigan

Society Activities

Many contacts were made during the year with members of the Society at Councilor District Meetings and County Society Meetings. These contacts were made by various members of the administrative personnel and were designed to publicize the various activities of the State Society and to allow a discussion of any question propounded by the members present. These meetings developed a critical discussion of the problems of the local and State organizations, problems of the public relations, the "dispractices" of medicine and other subjects bearing upon the development and maintenance of activities necessary to the establishment of medical practice on its deserving high plane.

Officers attended numerous Michigan county and district medical society meetings during the year and were honored by being invited to speak before state and county medical societies in Illinois, Indiana, New Jersey, Ohio, Oregon, West Virginia, and Montana. Their presentations before lay and civic organizations during the past twelve months—particularly after the inauguration of the CAP program—totaled hundreds of appearances, with messages beamed to the theme that voluntary medicine has achieved the best results for the people's benefit and is to be preferred to a compulsory federally operated type of political foreign medicine.

Secretary's Letters

As part of the Society's general educational program for individual members and component County Societies there were issued during the year 1949, thirteen Secretary's Letters, seven to county secretaries and keymen and six to all members of the Michigan State Medical Society.

Office Personnel

During 1949 the Executive Office Personnel has discharged its many duties with extra loyalty and untiring effort.

The still-existing crowded and scattered condition of our Executive Offices is working an ever-increasing hardship on the whole office personnel and is not conducive to good morale and the greatest efficiency.

Foremost Family Physician Award

The third annual "Foremost Family Physician Award" was accorded Charles J. Maxwell, M.D., of Paw Paw, Michigan. The award will be officially made in March, 1950, on the occasion of the Michigan Postgraduate Clinical Institute.

Public Relations

Upon a foundation of informed thinking and hard won experience, the Michigan State Medical Society has built a public relations activity that is unique.

In this annual report, it is impossible to do justice to medical public relations activity in Michigan by citing only those developments of a concrete nature that show on the surface. I plan to list some of the specific activities, but it should be remembered that while those intangibles that exist below the surface are nonetheless factual in nature, some of these unseen factors are plans, movements, investigations and contacts which were made yesterday and will bear fruit today and tomorrow.

In listing the activities I have tried to indicate the cause and effect factors involved. Consequently this report is divided, so that the cause for the activity is listed, followed by the effort made and concluded with the effect gained.

Campaign to Preserve the American Voluntary System of Medical Practice

Cause.—The threat of the Wagner-Murray-Dingell type of legislation came into sharp focus through the support given compulsory sickness insurance by the present Administration. Their entire concept of health care constituted a threat to the health of the people of Michigan and the United States. In consequence we determined upon a strong campaign to resist the imposing of this concept upon the people. This campaign began one year ago today and was called the CAP plan, meaning "Co-operation with the American People."

Effort.—After nearly three months of exhaustive work, planning and preparation The Council approved the CAP campaign. It has proven sound in every detail. Here is how it was implemented:

Nationally.—On February 12, 1949, the plan was presented to twenty-two state medical societies in Chicago. It was adopted in its entirety by seven states and in part by many others as is concretely indicated by the fact that 544 requests have come to Michigan from organizations outside this state for specific assistance. This figure does not include requests from individuals outside of Michigan. Nor does it include the invitations to MSMS speakers to travel to other states to tell what we are doing and how it is being done. Such talks were given before sixteen national groups, nineteen statewide conventions of various medical organizations and many local and regional meetings outside Michigan. Nor does it include requests for advice. This latter category has never been tabulated but their frequency has been daily in occurrence. The specific instances cited include only the use of our films (72), radio programs (10), printed speeches (230), and literature developed in connection with the CAP campaign (232). We have actively co-operated with the American Medical Association. We have actively participated in a minimum of twenty-one national conferences and had contact with other national groups.

Statewide: On January 9, 1949, the County Secretaries and Public Relations Conference received the CAP Plan. A Booster Session was held on March 24, 1949. Fourteen Councilor District CAP meetings were held in the spring and fourteen in the fall in addition to special treatment given in the four districts constituting Wayne County. A statewide CAP organization was set up headed by the Special Committee on Education and divided into District and County organizations. The Woman's Auxiliary was organized on the same basis. Six Public Relations Field Representatives were employed, trained and developed into a working team. Work was re-assigned to four representatives during the summer months. A Speakers Bureau Training and Organizing Program was held in Grand Rapids on September 22, 1949, and carried into each Councilor District, in the subsequent CAP meetings. Speeches were made before more than 1,432 groups, 7,464 radio programs have been put on the air, over 1,231,000 pieces of literature have been distributed. Eight pamphlets have been developed and printed and four pamphlets reprinted. 7,120 news releases have been made, twenty-seven articles written for journals having a statewide distribution. We have prepared and filmed one commercial motion picture and placed another in 312 theaters. We have prepared and placed three ads in forty-nine daily and fifty-six weekly newspapers, and one magazine, going to a reading circulation of 1,250,000 persons. Twenty-seven CAP and Legislative Bulletins have been issued to a mailing list of 991 members of the MSMS and Woman's Auxiliary, seven of these to the entire membership of the MSMS and four to the entire

membership of the Woman's Auxiliary. We have had a close working relationship with nearly every Michigan statewide health organization and some active contact with scores of other state organizations which have a major interest in health or in the problem at hand.

County and Local.—In fifty-five County Medical Societies, fifty-five CAP Committees have been organized with additional sub-committees. Hundreds of meetings have been held in these medical societies on this program. The distribution of literature, the speeches, and some of the radio programs, listed above of course have been carried out by the individual doctors and their wives as well as some laymen. Valuable contacts have been made in nearly every community of Michigan with other organizations in that community. *Most important of all is the fact that it is conservatively estimated that well over 100,000 persons have been individually addressed by Doctors of Medicine on this subject attributable in a great degree to this CAP campaign.*

Effect.—A ground swell of opposition to the leanings of the socializers has been started. Two hundred and fifty-one groups have passed resolutions against socialized medicine. Aid was evidenced in opposition to the President's Reorganization Plan No. 1. National leadership has been given in the campaign. Legislation which would have placed doctors under Social Security has been successfully protested. The Legislature of Michigan has gone on record against Socialized Medicine. Legislative activity has been successfully carried out in connection with forty-nine bills directly affecting medicine and health.

Experience has been gained pointing to the need for greater co-ordination in 1950 with other organizations. Great opportunities for assistance lie in the help that is ready to be given by such organizations as the Junior and Senior Chambers of Commerce, the State Bar of Michigan and the Junior Bar Section, the representatives of the Drug and Insurance industries. These resources are almost untapped and should constitute a major portion of our effort in 1950.

Experience has further shown us that in the CAP campaign we are carrying on a program that merits continuation in 1950 with the full support of every member of the MSMS and indeed of every person in Michigan who believes in the American way of life.

Experience from a trial meeting with the Press and Radio in the Bay City area has indicated the value of repeating such meetings in various districts in the state.

Improvement of Working Relationship with Rural People and Interests

Cause.—Much has been said especially by the would-be socializers about the paucity of doctors in rural areas, the lack of health facilities, the scarcity of general practitioners, the lowering of health standards in rural areas, etc.

Effort.—We have completed and are evaluating a survey of health in Michigan. We have been one of the strongest participants in the Michigan Rural Health Conferences. We have published two rural health conference reports and assisted in the third. We have established close liaison with the Michigan Farm Bureau and the Michigan Grange. We have repeatedly met with these two groups on the state and local levels. We have made a strong effort to meet the needs of these areas by the development and proper publicizing of such programs as the Doctor Placement Service, the Loan Fund for the Encouragement of Practice in Rural Areas (sponsored by the Michigan Foundation for Medical Health Education) the support of the Michigan Hospital Survey and Construction program, the Rheumatic Fever Control Program and the Hillsdale Cancer Detection Plan. These plans have not been carried out through the public relations activity of the MSMS but active support has been given them in their relationships with the people of Michigan.

One of the foremost efforts in the field has been the reactivation of the Michigan Health Council and the establishment of community health councils. Working closely with this organization we have developed close liaison with many state and local organizations which constantly prove valuable.

Effect.—We have retained the support of the agricultural interests of the state. The understanding gained has been that we have their interests at heart and are doing something about them and on the other hand they are earnestly supporting our stand on the question of socialized medicine and in other programs as well Experience gained has indicated that our support of the Michigan Health Council, the Michigan Rural Health Conference, the Michigan Foundation for Medical Health Education, and the other activities listed above inures to the benefit of the medical profession and should be continued.

Improving Working Relationships with Other Professional Health Organizations

Cause.—From time to time questions have arisen between the medical profession and other business and professions which deal directly with health. These have led to recriminations affecting the public relations of the doctors.

Effort.—Joint meetings with these groups have been held throughout the year. Closer co-ordination has been gained between the officers and the lay administrators of these organizations by close contact and mutual assistance.

Effect.—A greater bond of sympathetic understanding of each other's problems and of mutual problems has been gained and in many cases understandings as to methods and necessary changes in methods has been worked out to the satisfaction of all concerned. This again has improved the public relations of the doctors.

Supporting of Health Measures to Improve the Public Welfare

Cause.—The question of the sex deviate and the teaching of sex hygiene in the schools has taken a position of importance in the public mind. The development of local health departments and their support has become important in the public eye. The activities of voluntary health organizations such as the Cancer Societies, the Heart Association, the Tuberculosis Association and others are becoming increasingly important.

Effort.—We have taken a positive public position on questions such as the sex deviate, the establishment of local health departments, etc. We have established close liaison with the voluntary health organizations especially pertaining to their public educational activity.

Effect.—We have received repeated commendation in the public prints for the work being done on these questions of public interest. We have made progress toward co-ordinating the public educational program of the MSMS with that of the voluntary health organizations to the benefit of both. Experience gained has indicated that such activity should continue and expand.

Development of Health Information Centers

Cause.—Due to the multiplicity of health services now being offered to the people of Michigan brought about to a large extent by the medical profession the question of whom to see about this problem and where to get help

on some other problem has become so complex that in order to actually make them available most effectively to the people some system of answering the questions of the individual citizen must be developed.

Effort.—Plans are being made for the establishment of a Health Information Service in eighteen communities of Michigan. This would be a phone answering service for referral of the questioner to the proper sources of information. The development of this service through the District branches of the MMS and MHS is being contemplated with the organizational work done by the Michigan Health Council and the Community Health Councils and with the advice of the County Medical Societies.

Effect.—This program in its planning stages has received the enthusiastic interest and support of legislators, the Michigan Health Council, the Executive Committee of the MSMS and the Special Committee on Education, the Associated Medical Care Plan officials and others.

It has shown sufficient promise so that the enthusiastic support of this program, and the greatest publicizing of it, is felt to be highly desired.

Educational and Co-ordinating Activity with Medical Associate Groups

Cause.—Due to the increasing demand for services supplementary to those requiring the judgment and skill of the medical doctors and due also to the necessitv of combatting the introduction into the field of professionals of sub-standard healing; and also because of the willingness to serve the medical profession with medical assistance groups, it was felt that action should be taken toward improving the facility and possibilities for training of Medical Associates, and also for working with them in activities of a socio-economic nature.

Effort.—We have prepared and distributed a brochure outlining the opportunities and additional standards in the field of the Medical Associates. Over 18,000 of these brochures have been distributed to the schools of Michigan supplemented by personal visits through the members of the Women's Auxiliary of MSMS. In addition, we have included the Medical Associates organization in our State meetings and they have been included in local meetings of the County Medical Societies on socio-economic problems. Meetings have been held with college educators and advice given regarding medical associates to the Michigan Department of Public Instructions.

Effect.—The effect of this close liaison activity has been to secure support and additional offers of support by Medical Associates organizations, the acceptance of guidance from the Medical profession by these groups and nationwide credit for the development of a Medical Associates program.

Conclusion

Efforts in the CAP campaign and in the general public relations program of the MSMS should continue and be increased in the coming months, with emphasis throughout on the idea that Socialism itself (including socialized medicine) must be defeated. This is the strong feeling of the doctors of medicine in Michigan. Credit for the present success of the public relations program and its future promise is directly attributable to the payment of the $25.00 assessment by the general membership, to the untiring efforts of L. W. Hull, M.D., Chairman of the Public Relations Committee and the Special Committee on Education, to the work of the Members of The MSMS Council, to the CAP District Leaders, to the County Medical Society officers, and CAP Committee leaders and to the hundreds of unsung individual doctors who have vigorously supported the program

Our gratitude goes to each and every one—with the fervent plea that the active effort is maintained even more vigorously in 1950.

Summary of Progress in Michigan

That the Michigan State Medical Society is a progressive organization is a well-known fact. Long ago, the pioneering activity of Michigan's medical men was epitomized in the phrase "Another FIRST for Michigan." There are now over twenty-six "Michigan FIRSTS" outstanding among which are the following:

1. Established Michigan Medical Service (Blue Shield)
   Gave strong aid in establishment of Michigan Hospital Service (Blue Cross)
2. Established 26 Cancer Control Clinics and co-ordinated all cancer activity in Michigan
3. Established Rheumatic Fever Detection and Control Program (30 Detection and Control Centers)
4. Established Medical Associates Program
5. Set up year round continuing Postgraduate Training Program for Doctors in their home localities
6. Established two annual Postgraduate Clinical Conferences for all Doctors of Medicine
7. Established "Immunization Month"
8. Organized National Conference of Presidents
9. Organized National Conference of Public Relations Counsels
10. Organized National Conference of Legal Counsels of State Medical Societies
11. Established first year round radio series—"Tell Me, Doctor"
12. First State to use commercial distribution for medical motion pictures
13. Organized Michigan Health Council
14. Organized Michigan Rural Health Conference
15. Established Michigan Foundation for Medical and Health Education, Inc.
16. Established Mediation Board for hearing of Grievances
17. Established system of awards for outstanding lay leaders in health work
18. Set up network of Health Information Center (in Process)
19. Established Field Secretary network for implementation of Public Relations Program
20. Prepared sex education course for Public Schools
21. Set up first organized effort to solve sex deviate problems
22. Established Doctor Placement Service
23. Developed uniform fee schedule for governmental agencies
24. Established plan for Home Town Care of Veterans
25. Created first Medical Veterans Readjustment Board
26. Stimulated activity for creation of a National Health Congress

Officials of other state societies credit the advance of Michigan Medicine to the leadership which has been the good fortune of MSMS for many years.

A study of the "Top Command" should bring out some illuminating information and perhaps give reason for the Society's progress.

First, one is struck by the great change among the leaders of the Michigan State Medical Society—on the policy—making Council and among the officers—in a short space of years.

For example, not one Councilor on the 1935 Board still serves in that capacity.

Of the sixteen Councilors who served the profession in the years 1936, 1937, and 1938 but one remains in that capacity.

Only two councilors carry on from the year 1939.

From 1935 through 1949, a period of fourteen years, sixty-five changes among members of The Council and MSMS officers have occurred, including addition of the two new Councilors from Wayne County made by the 1948 House of Delegates.

Recommendations

As a result of a careful analysis of the Society's activities, the prospective economic conditions and the attitude of the public toward medical organizations, I respectfully submit the following recommendations for your consideration:

1. That since the $12.00 dues do not meet the operating expenses of the society, that provision be made for an allocation of part of the $25.00 assessment for these obligations.
2. That efforts to secure more adequate quarters for the Executive Offices be accelerated.
3. That District Conferences with Editors and Newspapermen be held in all parts of the State, this being designed to develop a better "Press" and to better inform the public on the scientific and economic aspects of modern medical practices.
4. That the MSMS through its Councilors and Public Relations Department attack vigorously any lethargy or lack of co-operation in the Rheumatic Fever program and the activities of the Michigan Heart Association on the part of any component County Medical Society, and that this campaign, to make every center active, be made a ninety-day project of the MSMS, among the top priorities, beginning March 1, and that a re-survey of this three-month project be made and presented to The Council by the Medical Co-ordinator of the Rheumatic Fever Control program in July, 1950.
5. That the Councilors be requested to impress on each of their component county societies the importance of having heretofore inactive members appointed to the personnel of their committees—especially to those committees dealing with the social and economic problems of medicine.
6. That in view of the "Speakers Bureau" activities of such organizations as the Junior Bar of Michigan, the Junior Chamber of Commerce, the Drug Industry, et al., the Special Committee on Education be instructed to develop the co-operation of these groups in the 1950 campaign for "Americanism."
7. That because of its educational value, the annual contact with Michigan Senators and Crongressmen in Washington be continued in 1950.

Your Secretary desires to express to the members of The Council his sincere appreciation for their fine personal and collective co-operation and the encouragement they have accorded him during 1949.

To the Executive Office personnel, Mr. H. W. Brenneman, Public Relations Counsel, and assistant counsel, Russell F. Staudacher, Mr. J. Joseph Herbert, Legal Counsel, and to Dr. Wilfrid Haughey, Editor, and Mr. Robert Roney, Assistant Executive Director, your Secretary is particularly grateful for their loyalty, willing application to their many tasks and many constructive suggestions. To Executive Director Mr. Wm. J. Burns, I wish to express a special appreciation for his wise counsel, helpful co-operation, and dynamic inspiration.

To all those who have aided so generously in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,
L. FERNALD FOSTER, M.D.
Secretary

EDITOR'S ANNUAL REPORT—1949

THE JOURNAL of the Michigan State Medical Society this year published a few more pages than in the year 1948—1,566. This is the largest since 1946. The pages have run as follows: 1944—1,134; 1945—1,428; 1946—1,682; 1947—1,476.

We have published more original articles from more authors than ever before. There were 174 authors with twelve appearing more than once. In 1948 and 1947 there were ninety-six authors each.

The book reviews have dropped off to seventy-nine as against ninety-six the previous year. This probably represents a tendency of the publishers' cutting down on the number of books.

There were thirty-two death notices against ninety-two for the previous year; but thirty-eight deaths for 1947 and fifty-two for 1946.

The number of editorials continue about equal, sixty-four in 1945, sixty-four in 1946, forty-five in 1947, sixty-one in 1948, and sixty-three in 1949. We have tried to cover editorially every phase of medical interest of which we were capable. We have stressed the socio-economic field, particularly, because of our belief that in these changing times with the threat of state socialism so ominous, our members at all times must be well posted on the professional problems, ambitions and objectives.

The editor expresses his appreciation to the Publication Committee, and to the other members of The Council, and numerous members of the State Society for hints or suggestions which have benefited the appearance and structure of THE JOURNAL, contents of THE JOURNAL, and have many times suggested editorial expression. The policy has been to help make Michigan one of the foremost states in medical thought and activities, and that has been accomplished.

We are proud of the appearance of THE JOURNAL this year, of its various covers outlined in color, suggesting diverse activities of the profession. Also of the general interest material which has been published.

We have received numerous letters of congratulation, and have just received a request for a copy of our November number, the Tuberculosis number, for the National Association for the Prevention of Tuberculosis, in England.

We have dedicated the April Number to Public Relations; the October Number to the Michigan Foundation for Medical and Health Education, Inc.; the November Number to the Michigan Health Council (including the Michigan Rural Health Conference).

We have at last succeeded in having three numbers of THE JOURNAL, the last three, published during the month appearing on the date line, with a promise from the printers that this will continue, and that we will soon be back on the 15th date.

Again I express my thanks to the Publication Committee and members of The Council.

Respectfully submitted,
WILFRID HAUGHEY, M.D., *Editor*

FOUNDATION PRESIDENT'S REPORT

The Michigan Foundation for Medical and Health Education, Inc., sponsored by the Michigan State Medical Society five years ago, held the Annual Meeting of its Membership and of its Board of Trustees on January 19 in Detroit. The following report on the activity of the Foundation during the past year was presented to the Membership by E. I. Carr, M.D., Lansing, President of the Foundation:

The activities of the Foundation, during this past year, have centered around the Third Annual Michigan Rural Health Conference for it was at the last annual meeting

of this corporation that your board of trustees agreed to sponsor the Conference of 1949 and to underwrite it to the extent of $2500.00. At the first meeting of the Committee on Arrangements for the Michigan Rural Health Conference, the President of this Foundation was elected Chairman of the 1949 Conference. It was voted that the facilities of Grand Rapids and of Western Michigan be chosen for that year. Fifty-three co-sponsors joined hands to promote this growing, expanding and increasingly comprehensive cause for the promotion of rural health. The Executive Secretary of the Michigan Health Council, Mr. Eugene H. Wiard, was indispensable to the success of the Conference, as secretary and executive supreme.

The Conference was held for two days, October 28 and 29 in the Pantlind Hotel and the Civic Auditorium. The Conference was opened by the General Chairman, your President, and Governor G. Mennen Williams presented the opening address. The Local Chairman of the Conference, Ira Dean of Grand Rapids, welcomed the group. The history and background of the Foundation were given by its President and follow in part:

"The Michigan Foundation for Medical and Health Education is interested in this Michigan Rural Health Conference because it is directly concerned with better distribution of medical care. No country in the world has so many doctors per capita as has America. At the present moment, there is one doctor for every 790 of the population of the United States. No other country in the world approaches this ratio of medical service. In New York City, the ratio is one to every 400 of population. The fly in the ointment for this distribution is the lamentable fact that metropolitan districts and specialism have become so attractive to young men in medicine that many rural districts are without doctors of medicine. In medical practice, as is true in almost all walks of life, thought has been turned to shortened hours, bright lights and daily entertainment. Furthermore, the vogue for special training, immediately following graduation in medicine in preparation for examinations to qualify in specialties, has usurped so large a number of recent medical graduates that general practice has become seriously depleted. A counter influence, fortunately, has already developed to meet and remedy this situation. State and national associations of general practitioners have been organized and the challenge, for a remedy to meet the dearth of young general practitioners, has been assumed by the American Medical Association and by many state medical societies. Influence has been directed towards medical school faculties to muster their recognition of this need. Another correction which has been striven for is to rectify the frequent omission of early experience in general practice whether general practice or specialism is to follow.

"The important point, toward which I am leading, is this: Rural practice, selected early in the career by a young doctor of medicine, accomplishes needed medical service in rural areas by those who may later choose a specialty. Many of the greatest specialists in the land climbed the ladder of fame through early rural practice. Again, many an aspirant for a specialty has found so great satisfaction in the life of the rural community that he has remained a practitioner and valued influence in the country or in the small town. Also, it is frequently observed that a recent graduate, who has trained immediately and directly for a specialty, has, for economic reasons or for experience, taken up an intended brief residence in a rural area and has found the pleasant living and the responsibilities of the small community so attractive that he has abandoned the specialty for which he trained.

"The Michigan Foundation for Medical and Health Education, fundamentally interested in the finance of education, has found a great opportunity for service in concerning itself with the medical needs of rural areas. It has found that this subject is one of the most challenging projects of this era. It is plain to see that while the Michigan Foundation is concerned with the education of medical students and young doctors, it is, at the same time, equally concerned with medical service in rural areas. Aiding and helping in medical education parallels an effort to aid in the better distribution of medical care.

"A concrete illustration of the Foundation's work in this field is the establishment of a revolving fund to encourage medical practice in rural areas. The fund provides supplemental financial aid to upper classmen in medical schools and interns and residents in hospitals, who, in return, will agree to practice in a rural area for a minimum of three years. A rural area we define as a community not to exceed 5,000 in population.

"Another illustration is the part that the Michigan Foundation took in contributing to the extent of its ability in conjunction with the Michigan State Medical Society, in a survey and research, conducted by the Sociology Department of the Michigan State College, to ascertain the medical needs in rural areas in the State of Michigan. These studies were conducted by Professors Charles P. Loomis, Charles R. Hoffer and Edgar A. Schuler. The value of this study was recognized by other states and national groups.

"In past years, the Foundation has co-sponsored various movements including Postgraduate Clinical Institute (a three-day postgraduate meeting for the practicing doctors of Michigan), Michigan Rural Health Conference, Michigan Heart and Rheumatic Fever Postgraduate Conference (another postgraduate course for practicing physicians), and Cancer Control Conference (for education of the public particularly, as well as of physicians)."

The foregoing part of the program was broadcast through the generosity of radio station WKAR for a full 30 minutes. Several other broadcasts were provided and preceded the Conference to publicize the plans for rural health betterment. The general assembly also included review and history of the Conference by Dr. Zemmer, the first chairman of these meetings, and Mrs. Charles Sewell of Chicago and The Farm Bureau presented a talk entitled, "Come Let Us Reason Together." The assembly was then divided into ten discussion groups of regional character and local health problems were explored. These findings are printed in the Report of the Conference. There were two speakers at the dinner meeting, Dr. J. S. DeTar of Milan who discussed "Significant National Trends During Three Years of Rural Health Conferences," and Mr. Paul D. Bagwell of East Lansing, Chairman of the Department of Written and Spoken English at Michigan State College and immediate Past President of the United States Junior Chamber of Commerce, had as his subject, "Hats Off To The Past—Coats Off To The Future."

The following morning reports of each discussion group were amalgamated. Obtaining and retaining medical practitioners in rural areas was the foremost feature subject by vote and by obvious interest and discussion and all felt the need of better community and physician understanding.

Next, the four voted problems were handled in four groups by the moderators and by the experts. There were:

1. Obtaining and retaining an M.D. in a rural area.
2. Community health education.
3. Rural public health.
4. Medical care facilities.

The 1949 Conference ended with a talk by Dr. J. O. Christianson of St. Paul who is Superintendent of the School of Agriculture of the University of Minnesota. An innovation at this Conference was the Farm Theatre. Five films were shown and this proved a popular part of the Conference. The accomplishments of the Conference are shown in the following resolutions:

1. That discussion pertaining to health personnel problems of a combined lay and professional character in a community should be initiated principally by lay groups, preferably through the medium of a County Health Council. That the local and state co-sponsoring groups explore the important question of making living, social and financial conditions of a nature to attract young medical practitioners and especially those with families, to locate in rural communities.

2. That Community Health education be implemented by training of persons in the mechanics of accomplishment of those objectives.

3. That the obtaining of local health departments is best achieved by co-operation between interested local groups and boards of supervisors.

4. That the Office of Hospital Survey and Construction give highest priority in its future construction plans to public health and medical care centers in isolated rural communities in order to attract physicians to such communities.

That greater emphasis be placed by the Office of Hospital Survey and Construction upon the widest possible distribution of information concerning the hospital and health center construction program under Public Law 725.

That the education of nurses, medical technologists, physical and occupational therapists and dietitians is primarily a responsibility of the public schools, colleges and universities which should set the standards and assume the major financial responsibility.

That the hospitals and health centers in every community be utilized to the fullest possible extent in such an educational program to make educational opportunities conveniently available to everyone.

That the opportunities for service in the health field be emphasized by vocational guidance councilors in the public schools, colleges and universities to the end that adequate numbers of trained personnel are available at all times to staff the health services of Michigan.

5. That a meeting of all co-sponsors of this Conference be called by the presiding chairman of the Conference at the earliest reasonable date following this meeting—preferably not later than January 31, 1950, for the purpose of determining upon a place and date and a Committee on Arrangements for the fourth Annual Michigan Rural Health Conference to be held in 1950.

As sponsor of this Conference the Foundation may feel justly proud of a service rendered to rural Michigan.

The attractive brochures before you on the 1949 Michigan Rural Health Conference are being distributed to all registrants of the Conference, to the attendants of the Secretary's Conference so that they will reach every County Society, and arrangements have been made for distribution at the Kansas City National Rural Health Conference next month and the American Medical Association has already requested 500 copies.

The Foundation is grateful for the Foundation Number of October, 1949 for the *Journal of the MSMS* to the several radio broadcasts principally through the courtesy of WKAR and to the many referrals on educational matters to the secretary's and president's offices and for various other means of effective publicity.

The revolving fund has not yet been utilized because of a prevailing hesitancy against a commitment to pay back.

To meet the many challenges and your wishes for Foundation activity the burning question still confronts us "how to get money."

TREASURER'S ANNUAL REPORT—1949

The changes in bonds owned during the year were as follows:

Balance at January 1, 1949 (at cost)			$89,476.60
ADDITIONS			
Purchase of United States Savings Bonds, Series F, maturing Dec. 1, 1961 (Principal amount $12,400.00)		$ 9,176.00	
Increase in redemption value of United States Savings Bonds, acquired in prior years	$122.20		
Less amortization of Bond Premium	12.83	109.37	
			$ 9,285.37
			$98,761.97

DEDUCTIONS

Description of Bonds Sold:	*Par Value*	*Cost*	*Sold For*	*Accrued Int.*
Canadian Pacific Railway Co. 4%, Perpetual	$ 2,000.00	$1,855.00	$1,967.50	$ 34.89
Detroit Edison Company, 3½%, maturing Sept. 1, 1966	$ 2,000.00	$2,187.50	$2,135.00	$ 18.86
Grand Rapids Affiliated Corp. 5%, maturing Oct. 1, 1955	$ 2,000.00	$1,650.00	$1,960.00	$ 18.61
New York Central Railroad Co. 4%, maturing Feb. 1, 1998	$ 2,000.00	$1,173.75	$1,080.00	$ 28.22
Southern Pacific Company, 4½%, maturing Mar. 1, 1977	$ 2,000.00	$1,322.50	$1,977.50	$ 24.25
	$10,000.00	$8,188.75	$9,120.00	$124.83

Above Bonds sold, were deducted at cost $8,188.75

United States Savings Bonds, Series "D" matured Apr. 1, 1949		$1,300.00*	$ 9,488.75
			$89,273.22
Above Bonds sold for (at Market Price)	$9,120.00		
Accrued Interest	$ 124.83		
	$9,244.83		
Expense of selling Bonds	$ 62.19		
(Commissions chg'd, Taxes, Postage, Bank Serv. Chgs.)			
Net proceeds from sale of Bonds		$9,182.64	
A credit difference		$ 6.64**	
Cost of United States Savings Bonds, Series "F"		$9,176.00	

**In explanation of disposition of matured Bonds:*
United States Savings Bonds, Series "D" matured Apr. 1, 1949 and were redeemed for $1,300.00, par value, which funds were deposited in The Detroit Bank and credited to account of Michigan State Medical Society.

***In explanation of disposition of credit differences:*
Proceeds from sale of above bonds was reinvested in Government Series "F" Bonds, with exception of $6.64, which was deposited in The Detroit Bank and credited to account of Michigan State Medical Society.

REPRESENTED BY—		
Bonds for general purposes	$59,273.22	
Bonds designated for Public Education Program	$30,000.00	
		$89,273.22

INCOME		
Cash Balance in Bank, at January 1, 1949		$ 1,624.29
Earnings on Bonds, (Jan. 1, 1949 to Jan. 1, 1950)	$ 2,335.00	
Credit difference between proceeds from sale of Bonds, and cost of Government Series "F" Bonds	$ 6.64	
Proceeds from United States Savings Bonds, Series "D" which matured Apr. 1, 1949	$ 1,300.00	
		$ 3,641.64
TOTAL		$ 5,265.93
EXPENSE		
Bank Charge, for safe-keeping of Bonds	$ 46.00	
Bank Charge, for safe-keeping of Bonds	$ 91.80	
		$ 137.80
CASH BALANCE IN BANK (Jan. 1, 1950)		$ 5,128.13
CASH IN BANK (Jan. 1, 1950)		$ 5,128.13
MARKET, or REDEMPTION PRICES OF ALL BONDS, as of Jan. 1, 1950		$85,969.00
TOTAL		$91,097.13

The actual cost of these bonds is $89,273.22, which includes the purchase price of interest bearing bonds, and purchase price of bonds bought on a discount basis, plus adjusted increase in value of the latter group.

EARNINGS ON BONDS DURING 1949

Deposited at The Detroit Bank, to the account of Michigan State Medical Society

	Interest Rate	*Date of Payment*	*Interest*	
U. S. Savings Bonds, Series "G"	2½%	Feb. 1-1949	$595.00	
U. S. Savings Bonds, Series "G"	2½	Mar. 1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	May 2-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	June 1-1949	137.50	
U. S. Savings Bonds, Series "G"	2½	Aug. 1-1949	595.00	
U. S. Savings Bonds, Series "G"	2½	Sept. 1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	Nov. 1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	Dec. 1-1949	137.50	
				$1,715.00
U. S. Treasury Bonds	2½%	June 15-1949	$100.00	
U. S. Treasury Bonds	2½	Dec. 15-1949	100.00	
				$ 200.00
Utility Bonds (which were sold)				
Canadian Pacific Railway Company	4 %	Jan. 6-1949	$ 40.00	
Canadian Pacific Railway Company	4	July 11-1949	40.00	
Detroit Edison Company	3½	Mar. 2-1949	35.00	
Detroit Edison Company	3½	Sept. 2-1949	35.00	
Grand Rapids Affiliated Corporation	5	April 6-1949	25.00	
Grand Rapids Affiliated Corporation	5	April 6-1949	25.00	
Grand Rapids Affiliated Corporation	5	Oct. 3-1949	25.00	
Grand Rapids Affiliated Corporation	5	Oct. 3-1949	25.00	
New York Central Railroad Company	4	Feb. 7-1949	40.00	
New York Central Railroad Company	4	Aug. 5-1949	40.00	
Southern Pacific Company	4½	Mar. 4-1949	22.50	
Southern Pacific Company	4½	Mar. 4-1949	22.50	
Southern Pacific Company	4½	Sept. 6-1949	22.50	
Southern Pacific Company	4½	Sept. 6-1949	22.50	
				$ 420.00
TOTAL EARNINGS OF BONDS—1949				$2,335.00

Respectfully submitted,
A. S. Brunk, M.D., *Treasurer*

ERNST & ERNST REPORT

We have examined the balance sheet of Michigan State Medical Society as of December 23, 1949, and the related statements of income and expense, surplus, and changes in reserves for the period from December 25, 1948, to December 23, 1949. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and changes in reserves present fairly the financial position of Michigan State Medical Society at December 23, 1949, and its income and expense for the period from December 25, 1948, to December 23, 1949, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding fiscal period.

ERNST & ERNST
Certified Public Accountants

January 10, 1950

BALANCE SHEET

December 23, 1949

ASSETS

Cash		
Demand deposits	$55,630.24	
Office cash fund	22.50	
Savings deposits	15,000.00	$ 70,652.74
Accounts Receivable		
Advertising	$ 3,595.69	
Space at 1950 Postgraduate Clinical Institute	5,570.00	
	$ 9,165.69	
Less allowance for losses in collection	100.00	9,065.69
United States Government Securities—at cost (aggregate market or redemption price $85,969.00)—Note A		89,273.22
		$168,991.65

LIABILITIES

Accounts Payable		
Current expenses and miscellaneous liabilities	$ 4,252.45	
Pay roll taxes	364.56	$ 4,617.01
Unearned Income		
Sales of space for 1950 Postgraduate Clinical Institute		8,790.00
Reserves—for unexpended funds received for special purposes		
Public Education Program:		
General activities $35,238.62		
Special activity 33,254.46	$68,493.08	
Rheumatic Fever Control Program	28,887.97	
Lecture grant	400.00	97,781.05
Surplus		
Balance at December 25, 1948	$71,963.49	
Net expenses for the period from December 25, 1948, to December 23, 1949	14,159.90	57,803.59
		$168,991.65

Note A—United States Government bonds in the amount of $30,000.00 have been designated as applicable to the reserve for Public Education Program.

INCOME AND EXPENSE STATEMENT

From December 25, 1948, to December 23, 1949

Income:		
Membership fees	$55,980.00	
Less portion allocated to income of "The Journal" for subscriptions	6,997.50	$ 48,982.50
Income from "The Journal"		5,995.14
Interest:		
On securities	$ 2,569.20	
On savings deposits	426.90	2,996.10
Gain on disposal of bonds		869.06
Miscellaneous income		282.96
TOTAL INCOME		$ 59,125.76
Expenses:		
Administrative and general	$35,980.10	
Society activities	15,314.86	
Annual and special sessions	437.48	
Committee expenses	21,553.22	73,285.66
NET EXPENSES		$ 14,159.90

Comments

The Michigan State Medical Society was organized on September 17, 1910, under the laws of the State of Michigan as a non-profit corporation. The charter has been extended for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes "The Journal of the Michigan State Medical Society".

The balance sheets at December 23, 1949, are summarized as follows:

ASSETS

December 23, 1949

Cash	$ 70,652.74
Accounts receivable	9,065.69
Securities	89,273.22
	$168,991.65

LIABILITIES

Accounts payable	$ 4,617.01
Unearned income	8,790.00
Reserves for unexpended funds received for special purposes	97,781.05
Surplus	57,803.59
	$168,991.65

Schedules included hereinafter show in greater detail the income from "The Journal" and the expenses of the Society in comparison with the respective budgets. "The Journal", as in prior years, has been allotted $1.50 from each membership fee.

Accounts receivable for advertising were classified as to period of charge and are summarized as follows:

PERIOD OF CHARGE

	December 23—1949 Amount	Per Cent
October, November, and December	$3,341.43	92.93%
July, August, and September	91.70	2.55
January to June, inclusive	162.56	4.52
TOTAL	$3,595.69	100.00%

Our examination of accounts receivable as of December 23, 1949, included tests of the balances by communication with selected debtors. It is our opinion the allowance of $100.00 is a reasonable provision for losses in collection of the accounts.

The changes in bonds owned during the period were as follows:

Balance at December 25, 1948			$89,476.60
ADDITIONS			
Purchase of United States Savings Bonds, Series F, maturing December 1, 1961		$9,176.00	
Increase in redemption value of United States Savings Bonds acquired in prior years	$122.20		
Less amortization of bond premium	12.83	109.37	9,285.37
			$98,761.97
DEDUCTIONS			
Bonds sold and matured:			
Canadian Pacific Railway Company, 4%, perpetual	$1,855.00		
Detroit Edison Company, 3½%, maturing September 1, 1966	2,187.50		
Grand Rapids Affiliated Corporation, 5%, maturing October 1, 1955	1,650.00		
New York Central Railroad Company, 4%, maturing February 1, 1998	1,173.75		
Southern Pacific Company, 4½%, maturing March 1, 1977	1,322.50		
United States Savings Bonds, Series D, matured April 1, 1949	1,300.00		9,488.75
Balance at December 23, 1949, (of which bonds in the amount of $30,000.00 have been designated for the Public Education Program)			$89,273.22

Bonds owned at December 23, 1949, have been stated at cost adjusted for increases in redemption price of United States Savings Bonds, Series F, and less amortization of bond premium. The bonds were confirmed by direct correspondence with the bank in which they are held for safekeeping, and we accounted for income from the bonds for the period. At December 23, 1949, the aggregate carrying amount of the bonds owned was $3,304.22 greater than the aggregate market or redemption prices. Details of the bonds are shown in a schedule in this report.

During the period the Society received $101,125.00 from county medical societies representing collections of assessments levied by the American Medical Association on its members. All such collections were remitted to the American Medical Association, and the amounts do not appear in the Society's financial statements.

EXPENSES

From December 25, 1948, to December 23, 1949

Administrative and general:		
Salaries—administrative		$ 7,000.01
Salaries—office		6,832.95
General counsel		4,440.07
Other legal expense		1,019.34
Office rent and light		1,537.20
Printing, stationery, and supplies		2,360.11
Postage		1,336.23
Insurance and fidelity bonds		3,757.05
Audit		735.00
New equipment and repairs		1,200.02
Telephone and telegraph		2,828.96
Pay roll taxes		2,066.27
Miscellaneous		866.89
TOTAL		$35,980.10
Society activities:		
Council expense		$ 6,860.85
Delegates to American Medical Association		1,170.97
General society travel		2,433.92
Officers' travel expense		3,031.06
National conference on medical service		90.07
Secretary's letter		1,190.62
Women's Auxiliary—annual meeting		300.00
Sundry society expense		237.37
TOTAL		$15,314.86
Annual and special sessions:		
Annual session:		
Scientific meeting		$ 2,969.93
Exhibit		4,429.19
Housing committee		1.86
Lantern slides		75.93
Officers' night and Biddle oration		136.85
Press		459.39
Printing, mailing, and postage		2,155.54
Registration		289.40
Salaries		4,863.34
State society night		640.00
Scientific work committee		188.87
Hotel expense		522.11
Speakers' conference		629.85
House of Delegates expense		1,339.89
Miscellaneous		319.62
TOTAL		$19,021 77
Postgraduate clinical expenses:		
Salaries		$ 2,011.75
Scientific meeting		2,151.01
Committee meetings		495.93
Printing		1,598.02
Mailing and postage		97.26
Exhibits		1,647.43
Press		727.59
Registration		162.72
Question box expense		66.26
Hotel expense		413.18
Housing committee expense		28.33
Miscellaneous		891.23
		$10,290.71
		$29,312.48
Less sales of display space:		
Annual session		$20,495.00
Postgraduate Clinical Institute		8,380.00
		$28,875.00
NET TOTAL		$ 437.48
Committee expenses:		
Cancer		$ 5,000.00
Child welfare		148.72
Legislative		2,133.23
Postgraduate medical education		3,442.91
Preventive medicine		77.58
Geriatrics		168.04
Industrial hygiene		61.35
Maternal health		285.08
Mental hygiene		201.31
Scientific radio		17.55
Venereal disease control		147.07
Tuberculosis control		152.97
Michigan Health Council		7,500.00
Sundry other		2,217.41
TOTAL		$21,553.22

THE JOURNAL

From December 25, 1948, to December 23, 1949

Income:	
Subscriptions from members	$ 6,997.50
Other subscriptions	435.37
Advertising sales	47,293.52
Reprint sales and cuts	3,491.18
	$58,217.57
Expenses:	
Salaries	$ 8,299.96
Editor's expense	1,800.00
Printing and mailing	28,856.22
Cost of reprints and cuts	2,868.63
Discounts and commissions on advertising sales	10,240.09
Miscellaneous	157.53
	$52,222.43
NET INCOME	$ 5,995.14

PUBLIC RELATIONS PROGRAM

From December 25, 1948, to December 23, 1949

Income from assessment of members	$116,625.00
EXPENSES	
Salaries	$17,067.11
Rent and light	473.40
Telephone and telegraph	2,145.12
Printing, stationery, and supplies	1,412.67
Postage	982.56
Office equipment and repairs	366.04
Travel	2,208.56
Public relations and secretaries' conferences	2,748.85
Publications and pamphlets	517.44
Committee meetings	654.13
Newspaper advertising	7,615.21
Radio programs	27,820.76
School programs and libraries	2.50
Cinema	15,243.04
Rural health conference	685.18
Clipping service	262.05
Miscellaneous	1,181.76
TOTAL EXPENSES	$81,386.38

PUBLIC EDUCATION RESERVE ACCOUNT

From December 25, 1948, to December 23, 1949

Salaries	$30,056.23
Printing, stationery, and supplies	11,676.61
Postage	573.61
Telephone and telegraph	1,946.70
Travel	10,566.53
Office equipment	256.58
Publications and pamphlets	7,837.91
Meeting expenses:	
Special committee on education	609.66
Field secretaries	832.66
County societies and other meetings	2,276.70
Cinema, radio, and newspaper programs	25.00
Miscellaneous	87.35
TOTAL	$66,745.54

CASH

December 23, 1949

Demand deposits:		
Michigan National Bank, Lansing—general account	$50,502.11	
The Detroit Bank—Treasurer's account	5,128.13	$55,630.24
Office change fund		22.50
Savings deposits:		
The Detroit Bank	$ 5,000.00	
The Manufacturers National Bank of Detroit	5,000.00	
Wabeek State Bank of Detroit	5,000.00	15,000.00
TOTAL		$70,652.74

RHEUMATIC FEVER CONTROL PROGRAM

From December 25, 1948, to December 23, 1949

INCOME

Grant from Michigan Society for Crippled Children and Adults, Inc.	$ 6,000.00
Grant from Michigan Heart Association	32,515.72
Grant from Michigan Chapter—Arthritis and Rheumatism Foundation	2,250.00
TOTAL INCOME	$40,765.72

EXPENSES

Expenses of central office:	
Salaries—administrative	$ 8,000.00
Salaries—general	599.99
Committee meetings	799.36
Pay roll taxes	180.60
Publications and pamphlets	324.51
Travel	707.49
Printing, stationery, and supplies	152.21
Postage	10.61
Miscellaneous	104.59
	$10,879.36
Expenses of local consultation and diagnostic centers—advances and expenses:	
Ann Arbor	$ 9.29
Bay City	1,000.00
Detroit	3,048.81
Grand Rapids	2,711.28
Jackson	
Kalamazoo	1,000.00
Lansing	608.79
Marquette	1,500.00
Muskegon (expense incl. with Gd. Rapids)	
Saginaw	200.00
Traverse City	1,004.50
	$11,082.67
TOTAL EXPENSES	$21,962.03

SECURITIES—December 23, 1949

Description	Interest Rate	Maturity	Interest Paid to	Principal Amount	Cost	Market or Redemption Prices 12-23-49	Market or Redemption Prices 12-24-48	Income For Period
Bonds held for general purposes:								
United States Savings Bond, Series G	2½%	6- 1-56	12- 1-49	$ 5,000.00	$ 5,000.00	$ 4,760.00	$ 4,735.00	$ 125.00
United States Savings Bonds, Series G	2½%	2- 1-57	8- 1-49	17,600.00	17,600.00	16,667.20	16,684.00	440.00
United States Savings Bond, Series G	2½%	6- 1-57	12- 1-49	5,000.00	5,000.00	4,735.00	4,740.00	125.00
United States Savings Bond, Series G	2½%	12- 1-57	12- 1-49	1,000.00	1,000.00	947.00	956.00	25.00
United States Savings Bonds, Series G	2½%	5- 1-58	11- 1-49	5,000.00	5,000.00	4,740.00	4,780.00	125.00
United States Savings Bonds, Series G	2½%	3- 1-60	9- 1-49	5,000.00	5,000.00	4,845.00	4,940.00	125.00
United States Savings Bonds, Series F	Note A	5- 1-53		2,500.00	2,217.50	2,217.50	2,152.50	65.00
United States Savings Bonds, Series F	Note A	7- 1-53		700.00	611.80	611.80	593.60	18.20
United States Savings Bonds, Series F	Note A	9- 1-53		500.00	437.00	437.00	424.00	13.00
United States Savings Bonds, Series F	Note A	12- 1-61		12,400.00	9,176.00	9,176.00	Note B	
United States Treasury Bonds	2½%	12-15-72/67	12-15-49	8,000.00	8,230.92	8,302.50	8,040.00	187.17-C
Bonds held for Public Education Program:								
United States Savings Bonds, Series G	2½%	8- 1-58	8- 1-49	30,000.00	30,000.00	28,530.00	28,860.00	750.00
Bonds sold and redeemed during period:								26.00
United States Savings Bonds, Series D								114.89
Canadian Pacific Railway Company								88.86
Detroit Edison Company								118.61
Grand Rapids Affiliated Corporation								108.22
New York Central Railroad Company								114.25
Southern Pacific Company								
			TOTAL	$92,700.00	$89,273.24	$85,969.00		$ 2,569.20

Note A—Bonds purchased on a discount basis. The amounts shown as cost of these bonds are the redemption values at December 23, 1949, and the amount of income shown for the period is the increase in redemption value over that at December 24, 1948.

Note B—Bonds purchased in 1949.

Note C—Interest income after amortization of premium paid on purchase.

MSMS BUDGETS—1950

GENERAL FUND

INCOME	
4400 Members @ $12 Dues	$ 52,800.00
Less Allocation to Jrnl. @ $1.50	6,600.00
	$46,200.00
Income from The JOURNAL	
Interest Income	2,500.00
Miscellaneous Income	100.00
TOTAL INCOME	$ 48,800.00
Allocated from 1950 Assessment (4400 members @ $5.00)	22,000.00
Deficit—1950	5,525.00
	$ 76,325.00
APPROPRIATIONS	
Administrative & General:	
Office Rent & Light	$ 1,600.00
Printing	1,200.00
Stationery & Supplies	1,200.00
Postage	1,500.00
Insurance & Fidelity Bonds	3,800.00
Auditing	735.00
Administrative Salaries	7,000.00
Office & General Salaries	8,940.00
General Counsel	3,600.00
General Counsel Expense	1,000.00
New Equipment & Repairs	2,500.00
Telephone & Telegraph	2,700.00
Payroll Taxes	2,100.00
Miscellaneous General Expense	600.00
	$ 38,475
Society Activity:	
Council Expense	$ 7,000.00
Delegates to AMA	3,400.00
General Society Travel	2,500.00
Officers' Travel	3,000.00
National Conference on Med. Service	250.00
Secretary's Letters	1,200.00
Woman's Auxiliary—Annual Meeting	300.00
Sundry Society Expense	300.00
	$ 17,950.00
TOTAL SOCIETY EXPENSE	
Committee Expense:	
Legislative Committee	$ 1,500.00
Distribution of Medical Care	50.00
P.G. Medical Education	5,000.00
Preventive Medicine	100.00
Cancer Control	1,000.00
Child Welfare	150.00
Geriatrics	200.00
Industrial Health	600.00
Maternal Health	700.00
Mental Hygiene	200.00
Scientific Radio	50.00
Venereal Disease Control	200.00
Tuberculosis Control	150.00
Ethics	
Scientific Work	
Michigan Health Council	7,500.00
Sundry Other Committees	2,500.00
	$ 19,900.00
GRAND TOTAL (Expenses)	$ 76,325.00

PUBLIC EDUCATION RESERVE ACCOUNT

INCOME	
Cash on Hand 12/24/49 (includes $30,000 in bonds)	$ 33,254.46
From Assessment—1950	15,645.54
	$ 48,900.00
EXPENSES	
Salaries	$ 26,600.00
Printing	1,000.00
Stationery & supplies	600.00
Postage	500.00
Telephone & Telegraph	1,000.00
Travel	10,000.00
Office Equipment	100.00
Publications & Pamphlets	5,000.00
Meeting Expense	
Special Comm. on Education	500.00
Field Secretaries	600.00
Co. Society & Other Meetings	2,500.00
Miscellaneous	500.00
TOTAL EXPENSES	$ 48,900.00

PUBLIC RELATIONS PROGRAM

INCOME	
Cash on Hand 12/24/49	$ 35,238.62
Allocated from Assessment 1950 (4400 members @ $20.00)	88,000.00
TOTAL AVAILABLE	$123,238.62
EXPENSES	
Clipping Service	$ 300.00
Committee Meeting Expense	600.00
New Equipment & Repairs	200.00
Postage	1,000.00
Printing	800.00
Stationery & Supplies	200.00
Office Rent & Light	500.00
Salaries	17,440.00
Telephone & Telegraph	2,100.00
Travel Expense	2,200.00
Cinema	5,000.00
Display Advertising	200.00
Newspaper Advertising	2,500.00
Publications & Pamphlets	1,000.00
Radio "Tell Me, Doctor" Programs	19,000.00
Schools—Sex Education and Libraries	100.00
National Meeting Expense	200.00
Annual County Secretaries—Public Relations Conference	3,000.00
Misc. General Expense	500.00
Rural Health Conference	500.00
TOTAL	$ 57,340.00
To P.E. Reserve Program 1950	15,645.54
TOTAL EXPENSES	$ 72,985.54
Balance to 1951—includes $30,000 in Bonds	$ 50,253.08

THE JOURNAL

INCOME	
Subscriptions (4400 @ $1.50)	$6,600.00
Other Subscriptions	400.00
Advertising Sales	45,160.00
Reprint and Cut Sales	3,000.00
TOTAL INCOME	$ 55,160.00
EXPENSES	
Printing and Mailing	$30,000.00
Reprint & Cut Expense	2,600.00
Disc. & Comm. on Adv. Sales	10,250.00
Salaries	10,310.00
Editor's Expense	1,800.00
Misc. JOURNAL Exp.	200.00
TOTAL EXPENSES	$ 55,160.00

RHEUMATIC FEVER CONTROL PROGRAM

INCOME	
Balance on hand Dec. 24, 1949	$ 28,887.97
Contribution of Mich. Heart Ass'n—1950	23,246.31
Contribution of Arthritis & Rheumatism Foundation	2,250.00
Contribution of Michigan Society for Crippled Children & Adults, Inc.	6,000.00
	$60,384.28
EXPENSES	
Central Office (Lansing)	
Travel	$ 1,000.00
Equipment & Supplies	1,000.00
Printing, Stationery & supplies	300.00
Postage	200.00
Payroll Taxes	200.00
Committee Meetings	1,200.00
Educational Conferences	3,000.00
Publications & Pamphlets	2,500.00
Miscellaneous Expense (Exhibit)	500.00
Salaries—Administrative	8,000.00
Salaries—General Office (2 persons)	1,500.00
Public Field Worker	4,800.00
	$24,200.00

EXPENSES OF CENTERS

Alpena	$ 500.00
Ann Arbor	200.00
Battle Creek	500.00
Bay City	1,200.00
Flint	500.00
Grand Rapids	1,750.00
Jackson	200.00
Kalamazoo	1,000.00
Lansing (incl. $300 salary)	800.00
Marquette	2,000.00
Muskegon	1,750.00
Pontiac	500.00
Port Huron	500.00
Saginaw	700.00
St. Joseph—Benton Harbor	500.00
Traverse City	1,500.00
Detroit (Wayne Co.—16 Centers)	4.000.00
Emergency	2,000.00
	$ 20,100.00
Balance to 1951	16,084.28
	$60,384.28

1950 ANNUAL SESSION

INCOME

Booth Sales	$ 15,990.00

EXPENSES

Scientific Meeting Expense	$ 3,000.00
Registration Expense (Incl. Badges)	300.00
Exhibit Expense (99 Booths)	4,140.00
Hotel Expense	500.00
Officer's Night & Biddle Oration	200.00
State Society Night Expense	600.00
Printing (Incl. Advance & Final Program) & Mailing & Postage	1,600.00
Press	400.00
Projection Expense	200.00
Committee on Scientific Work	100.00
Salaries	3,750.00
Luncheon Expense for Guest Speakers	100.00
House of Delegates (See Below)	800.00
Miscellaneous Expense	300.00
TOTAL EXPENSES	$15,990.00

HOUSE OF DELEGATES BUDGET

EXPENSE

Printing of Handbook	$ 330.00
Reporting of Proceedings	220.00
Reprints of Proceedings	150.00
Miscellaneous Expense	100.00
Total Expenses	$ 800.00

1950 MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

INCOME

Booth Sales	$ 8,920.00

EXPENSES

Scientific Meeting (Incl. Projection Exp.)	2,100.00
Committee Meetings	340.00
Printing (Incl. Advance & Final Program) & Mailing & Postage	1,700.00
Exhibit Expense (53 booths)	1,600.00
Press	400.00
Registration Expense (Incl. Badges)	150.00
Miscellaneous Expense (Incl. Housing Committee)	150.00
Hotel Expense	330.00
Salaries	2,150.00
TOTAL EXPENSES	$ 8,920.00

Let me assure you that there is nothing in the recent history of the Social Security Board or the Federal Security Administration to suggest that the proposed new program of socialized medicine would be administered in a manner different in any way from the standard pattern of bureaucratic operations—forms, paper work, regimentation, shocking inefficiency, and scandalous waste.—L. C. Arends, M.C., Illinois.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PROVISIONAL REPORT ON 1949 POLIOMYELITIS CASES IN MICHIGAN

Although the number of cases of poliomyelitis reported in 1949 greatly exceeded that of any other year, an analysis of the provisional data available at this time indicates that the outbreak followed approximately the same pattern that poliomyelitis has followed in Michigan in the past ten years.

The provisional total for 1949 was 2,896 cases which is considerably more than double the previous high which occurred in 1940 when 1,226 cases were reported.

Analyzing the data from the point of view of age indicates that approximately 60 per cent of the cases were under twelve years of age; approximately 70 per cent were under fifteen years, and the balance were over age fifteen. Cases occurred at practically all ages from under age one through age sixty-eight, the oldest case being sixty-eight years of age. The greatest number of cases occurred at age two.

One peculiarity of the outbreak was that the sharp increase which was expected in late June or early July started three weeks early. However, the peak week was also three weeks earlier so that the period of high incidence was of the same duration as in previous years. The week of greatest incidence was the thirty-third week which was the week ending August 20.

With reference to severity, the 2,896 cases were distributed as follows: 1,062 had demonstrable paralysis, 1,616 cases occurred in which actual paralysis was never demonstrated. There were eighty-three bulbar type cases and 135 on which sufficient data is not yet available to classify them.

The overall case fatality rate based again on provisional figures will probably be seven. Since the normal range of the case fatality rate for poliomyelitis is from five to twenty-five, this places 1949 in the low bracket for case fatality.

California, New York and Michigan, the states hardest hit by poliomyelitis, are the states which have had the greatest population increases in the past decade and thus the greatest increase in number of susceptibles.

NITRATES IN WATER

Examination in the Michigan Department of Health Laboratories of 2,874 samples of drinking water, submitted from the eastern part of the lower peninsula for bacteriological examination, revealed that 7 per cent of them contained more than ten parts per million of nitrates. It is generally accepted that ten or more parts per million may be toxic to infants when consumed by the expectant or nursing mother or in the baby's formula. In some cases, this concentration of nitrates causes methemoglobinemia or cyanosis—"blue babies."

More than 85 per cent of the high nitrate waters were from dug wells or wells less than 50 feet deep. Only three municipal supplies were among those which showed indications of high nitrates. The municipalities have been advised and further study is being made of municipal supplies. The study covered samples submitted during the first four months of 1949.

This Department considers it advisable that private water supplies, where they consist of the dug type or shallow well, be examined for nitrates in addition to bacteria when such supplies are to be consumed by nursing or expectant mothers or by newborn infants.

Specimens will be examined in the Lansing Laboratories of the Department when submitted by attending physicians. Samples for nitrate determinations should be submitted in regular "partial chemical" sample bottles. These bottles are available from the local health departments, the Upper Peninsula Office of the Michigan Department of Health in Escanaba, the Houghton, Powers or Grand Rapids branch laboratories or from the Michigan Department of Health, Lansing.

DENTAL HYGIENE

Benefits which an educational and remedial school dental program can accomplish in less than one generation's time, have been revealed in St. Joseph, Michigan.

A dental program was initiated in the schools of St. Joseph in 1927. Since that time there has been: (1) considerable improvement in the dental health of the school children; (2) an increase in the number of private practitioners who will take child patients; (3) an increase in the amount of children's dentistry done by private dentists; and as a result (4) a decrease in the number of children who require services of the school dentist.

A dental survey of 1,202 children in January, 1930, showed that 77.39 per cent of them needed dental attention. A dental survey of 2,295 children in 1941 showed that 41 per cent of them had "100 per cent teeth." By the fall of 1948 when another survey was conducted, 55 per cent of the children had "100 per cent teeth." The percentage has continued to improve although the school population has doubled in the two decades.

The services rendered children by private dentists has reduced the amount of work of the school dentist to a point where he averages only about one day a week in St. Joseph.

Winston M. Decker, D.V.M., a graduate of Michigan State College in the class of 1946, has joined the staff of the Division of Engineering as food and milk consultant. Dr. Decker previously was employed by the Kalamazoo City-County Health Department.

* * *

Because of the increasing number of requests from individuals and small non-professional groups to visit the Laboratories of the Michigan Department of Health, a

time has been set aside for tours—at 2 p.m. on the fourth Wednesday of each month. Persons over sixteen years of age who wish to make the tour should be in the lobby of the C. C. Young Diagnostic Laboratory Building at the time the tour is scheduled.

* * *

Films and film strips on cancer, heart disease, diabetes, tuberculosis, rheumatic fever, prenatal care, physical therapy and about fifty other health topics are among the 180 listed in the new 1950 catalog of the Michigan Department of Health Film Loan Library. The films may be borrowed without charge for showing to either lay or professional groups. The new catalog, information on the use of films and the method of distribution may be obtained by writing to the Visual Education Service, Michigan Department of Health.

* * *

Called to investigate an incident where nine industrial employes were overcome at their work, the Division of Industrial Health found that a negative pressure created by large fans blowing out paint spray, caused carbon monoxide fumes from heaters usually exhausted out of the building to be drawn back into the working area.

* * *

Four mobile chest x-ray units of the Michigan Department of Health were assigned to Calhoun county March 15 for the second of two pilot studies to determine the feasibility of mass, community-wide attack in tuberculosis case-finding in comparison with the long-term selected group surveys which have been the rule in recent years.

Effort will be made to x-ray the chests of more than 80,000 adults in the county with the four units plus one Calhoun county mobile unit. The Michigan Tuberculosis Association is assisting with promotion and publicity.

The first of the two pilot studies was made in Houghton county which has a high tuberculosis death rate in a small rural population. Calhoun county is being used for the second study because, while it has a lower tuberculosis death rate, it includes metropolitan areas with concentrated population.

When this second study is complete the Department will have information on which to determine future policies regarding the use of its units in tuberculosis case-finding in the state.

* * *

Margaret Shetland, Associate Chief of the Public Health Nursing Section, is teaching a University of Michigan extension course in public health nursing supervision in Kalamazoo.

* * *

Michigan's local water works and sewage works men and health department sanitarians are getting the latest information in water and sewage works operation in four extension courses being given in various sections of the state for the fifth consecutive year.

The courses are sponsored jointly by the Education Committee of the Michigan Section, American Water Works Association, the University of Michigan, the State

New: highly-soluble riboflavin

injection solution

HYFLAVIN (ENDO)

(methylol riboflavin)

The development of this new highly-soluble riboflavin compound permits the preparation of a concentrated solution without requiring the use of undesirable solvents. Hyflavin injection is ready for immediate administration by withdrawal directly into the syringe. This obviates the inconvenience of preparing a riboflavin injection solution from the dry powder. Hyflavin is used where rapid replacement of riboflavin is indicated or where there is interference with its intake, absorption or utilization.

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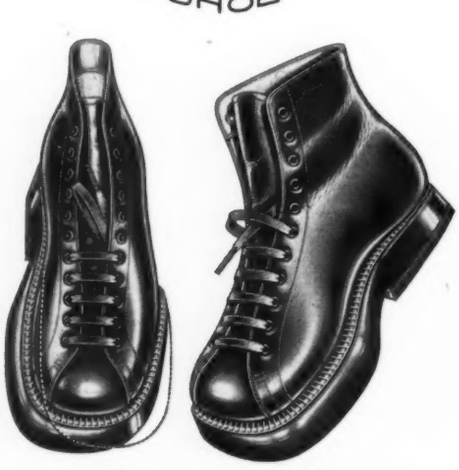

RIGHT LEFT

Dotted line on cut shows outline of normal shoe. Shoe cut shows abnormal outward swing of Sabel's Club Foot Shoe.

Sabel's Club Foot Shoes are for use after the doctor has over-corrected the position of the club foot. The outward swing of this shoe braced by the long outside counter will tend to keep the position the doctor desires.

Sabel's Surgical Shoes are carried in pattern and leather matching the Club Foot Shoes so that where required, even in split sizes, they can be fitted to the other foot.

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Board of Control for Vocational Education, Michigan State College and the Michigan Department of Health.

There will be an advanced course in "Fresh Water Biology" at the University of Michigan, Ann Arbor; "Problems in Water Supply Engineering" in Detroit; "Chemistry Applied to Water Purification" in Saginaw; and "Water and Sewage Bacteriology" in Jackson.

* * *

Dr. J. T. Tripp, Associate Director of the Division of Laboratories, has been named to the advisory committee on Serum Albumin and Dr. H. D. Anderson, Assistant Director of the Division of Laboratories, to a similar committee on Serum Gamma Globulin for the Commission Plasma Fractionation and Related Processes of Harvard University.

* * *

Public health people from six foreign countries arrived in the Michigan Department of Health during January for observation or study.

They included Mr. and Mrs. Karles Talberg of Latvia and Dr. Edith Taylor of Connaught Laboratories, Toronto, Canada, who visited the Grand Rapids branch laboratories; Barkat Narain, M.D., Director of Health Services, Delhi, India; Rogelio N. Relova, M.D., and H. A. Ylagan of the Philippines; Chryssa Kritikos of Athens, Greece; Doon Bunnag of Bangkok, Thailand; and Kenneth McLeod of Prince Edward Island, Canada, who visited the Department in Lansing.

* * *

A new Section of Recruitment and Training has been organized in the Division of Local Health Administration. Duties of the section will include co-ordination of existing training programs for public health personnel, development of new training facilities, recruitment of qualified personnel for public health work, and interesting more high school and college students in training for public health professions.

Roy Manty, who has been with the Michigan Tuberculosis Association, has been employed as public health training administrator to head the new section.

* * *

The boards of supervisors of Wexford, Missaukee, Roscommon, Crawford, and Kalkaska counties by unanimous action created a five-county health district effective February 1, 1950. Wexford has had a single county health department for the past twenty-two years. The other counties had a four-county district health department.

Clifford Merritt, M.D., is the Director of the five-county health department. Main offices will be in Lake City with subsidiary offices in Cadillac.

Federal taxes are already seven times the pre-war figure, while state and local taxes have nearly doubled. . . . At a $5,000 wage, a family man pays $432 as against $48 in 1939. . . . Corporations pay $10.4 billions against $1.5 billions before the war; individuals pay $18.8 billions, against $2.4 billions.—*Detroit Free Press.*

In Memoriam

William Edward Alleger, M.D., of Pittsford, Michigan, was born April 29, 1877, in Ransom Township and was graduated from the Detroit Homeopathic College in 1909. He was a past president of the Hillsdale County Medical Society and a former member of the Michigan State Medical Society and the American Medical Association. Doctor Alleger had practiced medicine in Pittsford for forty years and died on December 4, 1949, at the age of seventy-two years.

George Adam Drescher, M.D., Lewiston, Michigan, was born October 23, 1887, in Kawkawlin, Michigan, and graduated from the Detroit College of Medicine in 1915. He was a member of the North Central County Medical Society, the Michigan State Medical Society and the American Medical Association. Dr. Drescher died on December 16, 1948, in Lewiston, Michigan, at the age of sixty-one years.

Edward Otto Foss, M.D., of Muskegon, Michigan, was born August 4, 1881, and was graduated from the Hahnemann Medical College and Hospital, Chicago, in 1906. He was a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Foss died January 8, 1950, in Muskegon, Michigan, at the age of sixty-eight years.

Frederick Norman Morford, M.D., of Muskegon, Michigan, was born December 17, 1892, in Evart, Michigan, and was graduated from the Wayne University College of Medicine in 1916. He served with the Army Medical Corps during World War I, was president of the Muskegon County Medical Society in 1929, was a member of the Michigan State Medical Society and the American Medical Association. Doctor Morford died September 12, 1949, in Muskegon at the age of fifty-seven years.

Arthur Joseph Neumann, M.D., of Grosse Pointe, Michigan, was born in 1891 and was graduated from the Chicago College of Medicine and Surgery in 1917. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association, and an Associate Fellow of the International College of Surgeons. Doctor Neumann died at the age of fifty-eight in Detroit on November 28, 1949.

James Timothy O'Hora, M.D., of Detroit, Michigan, was born in Mazomaine, Wisconsin, in 1895, and was graduated from Rush Medical College in 1926. He served with the U. S. Army during World War I, was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association, the American Board of Otolaryngology and the American Academy of Ophthalmology. He was Chief of the ear, nose and throat staff at Woman's Hospital and was also on the staff at Children's and Henry Ford Hospitals. Doctor O'Hora died November 9, 1949, in Detroit at the age of fifty-four years.

Gertrude D. Campbell O'Sullivan, M.D., of Mason, Michigan, was born January 24, 1866, in Bradford, Pennsylvania, and was graduated from the University of Michigan Medical School in 1896. She took postgraduate studies at the Rotunda Hospital, Dublin, Ireland, the Margaret Hague Hospital, Jersey City, N. J., and the Postgraduate School in New York. She was a member of the Ingham County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the American Medical Association. For many years she served as city physician and health officer in Port Huron, Michigan, and was on the staff at Edward W. Sparrow Hospital, Lansing. Doctor O'Sullivan died on September 14, 1949, in Mason, at the age of eighty-three years.

Edward J. Panzner, M.D., of Detroit, Michigan, was born January 11, 1874, in Detroit and was graduated from the Detroit College of Medicine in 1893. He was a member of the Wayne County Medical Society, an Emeritus member of the Michigan State Medical Society, a member of the American Medical Association, a Fellow of the American College of Surgeons and of the International College of Surgeons. Doctor Panzner was Chief of the Surgical Staff at Providence Hospital for thirty-five years and was on the staff at Grace and Holy Cross Hospitals. He died October 10, 1949, in Detroit at the age of seventy-five years.

Max Minor Peet, M.D., of Ann Arbor, Michigan, was born October 20, 1885, in Iosco, Michigan, and was graduated from the University of Michigan Medical School in 1910. He was a member of the Washtenaw County Medical Society, the Michigan State Medical Society and the American Medical Association, a Fellow of the American College of Surgeons, member of the American Surgical Association, Society of Neurological Surgeons, American Neurological Association and had been a member of the International Neurological Congress in Berne, Switzerland, and in London. Doctor Peet was professor of Surgery at the University of Michigan since 1930 and was best known for his original work on splanchnic section for arterial hypertension. He expired on March 25, 1949, in Ann Arbor, Michigan, at the age of sixty-three years.

Antoine Shirley Petkus, M.D., formerly of Muskegon Heights, Michigan, was born in 1910 and was graduated from the University of Illinois College of Medicine in

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1939. She had been a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. She had only last year moved to Fullerton, California, where she died on April 18, 1949, at the age of thirty-nine years.

Henry Michael Quinn, M.D., of Copemish, Michigan, was born in Keeseville, New York in 1882 and was graduated from the Wayne University College of Medicine in 1907. He was a member of the Manistee County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Quinn died on July 2, 1949, in Copemish at the age of sixty-seven years.

George L. Renaud, M.D., of Detroit, Michigan, was born in Detroit on March 10, 1870, and was graduated from the Wayne University College of Medicine in 1891. He took postgraduate work in New York and Paris, was a member of the Wayne County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the American Medical Association. He was also a member of the American Academy of Ophthalmology, and the Nu Sigma Nu Medical Fraternity. Doctor Renaud was the author of many articles on hay fever and throat ailments. He died July 8, 1949, in Detroit, at the age of seventy-nine years.

Andrew C. Roche, M.D., of Calumet, Michigan, was born in Pinckney, Michigan, in 1875 and was graduated from the University of Michigan School of Medicine in 1903. He served in the Spanish American War, was president of the Houghton-Baraga-Keeweenaw County Medical Society in 1926 and served for five years on the Michigan State Board of Medical Examiners. He was also a member of the Michigan State Medical Society and the American Medical Association. Doctor Roche had practiced in Calumet since 1914 and was on the staff at Calumet Hospital. He died April 25, 1949, at the age of seventy-four years.

Thomas M. Sanford, M.D., of Lansing, Michigan, was born January 2, 1865, and was graduated from the Barnes Medical College, St. Louis, Missouri in 1894. He served as Ingham County physician for eight years, was a member of the Ingham County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the "50 Year Club" and also a member of the American Medical Association. Doctor Sanford had practiced in Lansing since 1905 and was eighty-four years of age when he died on January 30, 1949.

William F. Shannon, M.D., of Detroit, Michigan, was born in New York City in 1911 and was graduated from the University of Cincinnati College of Medicine in 1938. He served with the U. S. Army Medical Corps during World War II, was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association and the American College of Surgery. He died September 8, 1949, in Grosse Pointe Park, Michigan, at the age of thirty-eight years.

Say you saw it in the Journal of the Michigan State Medical Society

Raymond Nelson Slate, M.D., of Detroit, Michigan, was born in Colfax, Washington, in 1889, and was graduated from the University of Michigan School of Medicine in 1922. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Slate died December 28, 1949, in Detroit at the age of sixty years.

Lillian Richardson Smith, M.D., of Harwich, Cape Cod, Massachusetts, was born in Muskegon, Michigan, in 1885, and was graduated from Tufts College Medical School in 1917. She was Director of the Bureau of Maternal and Child Health of the Michigan Department of Health for twenty-two years, was a former member of the Ingham County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Smith died April 13, 1949, in Cape Cod, Massachusetts, at the age of sixty-four years.

Leo John Stafford, M.D., of Adrian, Michigan, was born November 16, 1889, in Springville, Michigan, and was graduated from the Wayne University College of Medicine in 1911. He served as a Captain in the Medical Corps during World War I, was a member of the Lenawee County Medical Society, the Michigan State Medical Society, the American Medical Association and the Nu Sigma Nu medical fraternity. He had practiced in Adrian since 1913 and was Chief of Staff at Bixby Hospital. Doctor Stafford died July 26, 1949, at the age of fifty-nine years.

Jacob Talso, M.D., of Ishpeming, Michigan, was born September 9, 1872, in Laihia, Finland. He came to the United States in 1896 and was graduated from the Chicago College of medicine and surgery in 1910. He was a member of the Marquette-Alger County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Talso had practiced in Ishpeming since 1921 and was owner and operator of the Grace Hospital there. He died May 30, 1949, at the age of seventy-seven years.

Pius Lee Thompson, M.D., of Grand Rapids, Michigan, was born in 1878 and graduated from the University of Michigan Medical School in 1903. He studied surgery for two years in Germany, and practiced surgery at St. Mary's Hospital in Grand Rapids for thirty-three years. Dr. Thompson was president of the Kent County Medical Society in 1941, a member of the American Medical Association and the Michigan State Medical Society. Dr. Thompson died on January 18, 1949, while visiting relatives in Gulfport, Mississippi. He was seventy-one years of age.

Franklin Reuben Walters, M.D., of Battle Creek, Michigan, was born in Chagrin Falls, Ohio, in 1881, and was graduated from the University of Wooster, Medical Department, Cleveland, in 1905. He took postgraduate studies in Vienna, was a member of the Calhoun County Medical Society, the Michigan State Medical Society, the American Medical Association and a Fellow of the American College of Surgeons. Doctor Walters operated the

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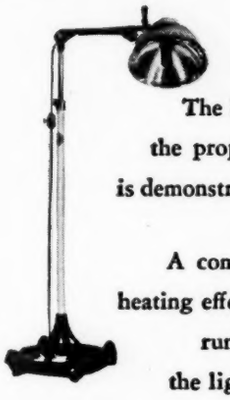

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*Arch. Physical Medicine, 30:691-99 (November) '49.

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Community Hospital at Moose Lake, Minnesota, for twenty years and was at the time of his death Industrial Surgeon of the W. K. Kellogg Company. He died October 22, 1949, in Battle Creek at the age of sixty-eight years.

Frank Dudley B. Waltz, M.D., of Detroit, Michigan, was born in 1878 and was graduated from the Wayne University College of Medicine in 1903. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Waltz had practiced in Detroit since 1912 and was seventy-one years of age at the time of his death on November 14, 1949.

George Waters, M.D., of Purt Huron, Michigan, was born February 20, 1874, in Park Hill, Ontario. He was graduated from the Wayne University College of Medicine in 1903 and served as a Major in the Medical Corps during World War I. He was President of the St. Clair County Medical Society in 1935, was a member of the Michigan State Medical Society and the American Medical Association. He was also a member of the Michigan Tuberculosis Association and the American Trudeau Society. Doctor Waters had practiced in Port Huron for twenty-nine years and was a member of the Board of Education there. He died July 4, 1949, at the age of seventy-five years.

Llewellyn G. Wedgwood, M.D., of Grandville, Michigan, was born June 26, 1873, and was graduated from the Wayne University School of Medicine in 1899. He was a member of the Kent County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Wedgwood died December 5, 1949, in Grand Rapids, Michigan, at the age of seventy-six years.

Norman Lee Woodry, M.D., of Detroit, Michigan, was born in 1890 at Imlay City, Michigan. He was graduated from the Wayne University College of Medicine in 1913, was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He was also a member of the Detroit Ophthalmological Society, the Detroit Otolaryngological Society and the American Academy of Ophthalmology. He was on the Staff at Harper, Mt.

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Carmel Mercy and the Florence Crittenden Hospitals. Doctor Woodry died August 6, 1949, in Detroit at the age of fifty-nine years.

August Karl Zinn, M.D., of Ypsilanti, Michigan, was born October 29, 1901, in Galesburg, Michigan, and was graduated from the University of Michigan Medical School in 1925. He attended the New Orleans Eye, Ear, Nose and Throat School in 1932 and served as a Captain in the Army Medical Corps during World War II. He was a member of the Washtenaw County Medical Society, the Michigan State Medical Society, the American Medical Association and the Michigan Triological Society. He had practiced in Battle Creek, Michigan, for fourteen years before moving to Ypsilanti and was on the staff at Beyer Hospital. Doctor Zinn died in Ypsilanti, Michigan, on May 15, 1949, at the age of forty-seven years.

The Surgeon General of the Army announced that one of the most detailed and comprehensive scientific treatises ever attempted, the "Atlas of Tumor Pathology," is being published by the Armed Forces Institute of Pathology for the National Research Council, which work is expected to be important in the fight against cancer. When complete the work will appear in 39 parts and will require two more years to finish publication. (From Department of the Army, Technical Information Office, release dated December 27, 1949.)

Correspondence

AMERICAN MEDICAL ASSOCIATION
Mr. William J. Burns
Lansing 8, Michigan
Dear Mr. Burns:

On January 9, 1950, an estimate was made of all monies sent in by the various state and territorial medical associations in payment of the 1949 assessment. This shows that, percentage-wise, your society stands No. 2 on the list of 53 constituent associations.

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January 20, 1950

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* * *

Dr. Gordon H. Scott was named Dean of Wayne University College of Medicine by the Detroit Board of Education on January 10. Congratulations, Dean Scott!

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, spoke to the Grace Hospital Staff, Detroit, September 30 on "Impractices"; the Bay County Dental Society on October 3, "What Compulsory Health Insurance Means to the Public"; the Michigan Consumer Finance Association Annual Meeting, October 27, on "Socialized Medicine"; the Vassar Service and Women's Clubs on November 28, "The Welfare State and Medicine"; the Staff Meeting of Bay City General Hospital on December 8, "Medical Public Relations"; the Calhoun County Medical Society, Battle Creek, January 3, on "The Medical Profession and the Press"; the League of Catholic Women, Bay City, January 16, on "Compulsory Health Insurance"; the Bay City Rotary Club, January 31, on "Socialism vs. Americanism"; and the "Hi-12 Club" of Bay City, February 6, on "What Socialized Medicine Means to You."

* * *

E. E. Poos, M.D., Detroit, presented a paper at the Annual Meeting of the American College of Allergists in St. Louis on January 18. The title was "Mechanism of Allergy of the Eye and Its Adnexia."

George L. Waldbott, M.D., Detroit, read a paper before the Allergists entitled "Organizations of an Allergy Office."

* * *

The anesthetists of Michigan will hold a Sectional meeting in Suite 500, Book-Cadillac Hotel, Detroit, on Friday, September 22, 1950 (luncheon meeting). This meeting will be coincident with the MSMS Annual Session, September 20-21-22, 1950.

Harry C. Kurtz, M.D., Detroit, will lead a discussion entitled "Pulmonary Edema as Related to Anesthesia."

For reservations write H. J. VanBelois, M.D., 522 Medical Arts Building, Grand Rapids 2, Michigan.

Tuberculosis After Forty?

Twenty years ago 32 per cent of TB deaths in Michigan were among persons forty years of age and over. Ten years ago 48 per cent of deaths were in this age group. In 1948, it was 68 per cent. The peak of TB deaths in Michigan continues to move towards the middle and older age groups.

MICHIGAN TUBERCULOSIS ASSOCIATION

Michigan Industrial Health Day

Michigan's first Annual Industrial Health Day is scheduled for Ann Arbor on Wednesday, March 29, 9:30 a.m. to 5:00 p.m. Scientific program was printed in February Journal, Page 226.

Albert Heacock Whittaker, M.D., Detroit, president of the American Association of Industrial Physicians and Surgeons, will be honored by Michigan's industrial physicians and surgeons at a banquet at the Allenel Hotel, Ann Arbor, the evening of March 29. Following the dinner, John A. Schindler, M.D., of the Monroe Clinic, Monroe, Wisconsin, will speak on "Old Age—an American Problem."

All members of the Michigan State Medical Society are cordially invited to attend the scientific and social functions of Michigan Industrial Health Day on March 29 in Ann Arbor.

Ralph A. Johnson, M.D., and E. D. Barnett, M.D., both of Detroit, have been appointed by the Board of Trustees of the American Medical Association as members of the Correlating Committee of the Council on Medical Service.

Congratulations!

* * *

The E. R. Witwer, M.D., Memorial Lecture has been established by the staff of Bon Secours Hospital in Detroit. Dr. Witwer, long-time Councilor of the Michigan State Medical Society, was active in the development of this hospital and in organizing its Department of Roentgenology.

The first Witwer Memorial Lecture was given February 14 at 8:00 p.m. in the Auditorium of the Pierce Junior High School, Grosse Pointe. Kenneth Corrigan, Ph.D., Research Physicist of Harper Hospital, Detroit, was the lecturer. His subject was "Radiation in the Diagnosis and Treatment of Disease."

* * *

The National Cancer Institute (Public Health Service, Federal Security Agency) has granted $25,000 to the University of Michigan (Dr. Henry F. Vaughan) for "Instruction for the Prevention of Cancer"; and $4,590 to Wayne University College of Medicine (Dr. M. Mason Guest) for "An Investigation of the Fibrinolytic Enzyme and Inhibitor Systems in Blood and Urine and the Relationship to Cancer."

The National Cancer Institute recently made a $7,500 grant to the Detroit Institute of Cancer (William L. Simpson, M.D.) for "Mucopolysaccharides and Mucolytic Enzymes in Experimental Carcinogenesis"; and Dr. A. R. T. Denues $8,370 for "Fine Structure of Chromosomes of Normal and Malignant Cells"; Detroit Institute

(Continued on Page 374)

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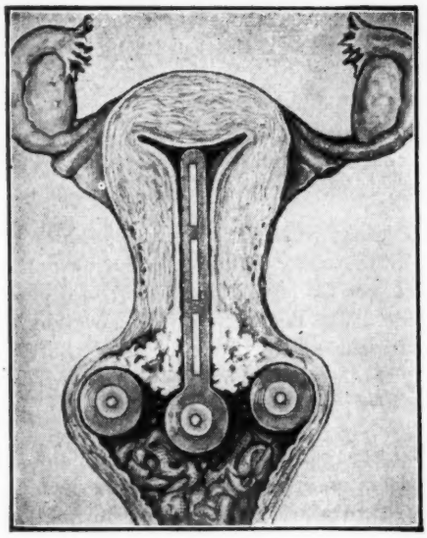

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(Continued from Page 372)

of Cancer Research $6,000 to R. M. Johnson, M.D., for "Lipid Studies in Relation to Carcinogenesis."

The National Cancer Institute also contributed $150,000 for clinical research facilities at Wayne University College of Medicine and for laboratory facilities at the Detroit Institute of Cancer Research (Drs. Gordon H. Scott and Wm. L. Simpson).

* * *

"Never! Never! Never!"—Harold E. Stassen's report on British socialized medicine in the January **Reader's Digest.** Very worthwhile reading.

* * *

Gen. Paul R. Hawley, M.D., became Director of the American College of Surgeons on March 1. Dr. Hawley resigned as Chief Executive Officer of the Blue Cross and Blue Shield Commission to become AC of S Director. Dr. Malcolm MacEachren became Director Emeritus of the AC of S and will continue to head the hospital standardization program and will assist with other special activities.

* * *

E. I. Carr, M.D., Lansing, and E. F. Sladek, M.D., Traverse City, have been appointed Regent and Vice Regent, respectively, for Michigan by Custis Lee Hall, M.D., President of the International College of Surgeons, United States Chapter.

* * *

LeRoy H. Cox, Public Relations Director of the Medical Society of the State of North Carolina, visited the Michigan State Medical Society Executive Offices the week of February 6 to observe the organizational and public relations activity of MSMS.

* * *

O. O. Beck, M.D., Birmingham, MSMS Council Chairman, spoke on "Socialized Medicine" before the Soroptimist Club in Pontiac on January 16.

* * *

Don Marshall, M.D., Kalamazoo, is author of an original article "Laceration of the Eye" which appeared in *JAMA* of January 28.

* * *

Eugene H. Payne, M.D., Detroit, is co-author of an article, "Chronic Brucellosis," which appeared in JAMA of January 21, 1950.

* * *

Wilfrid Haughey, M.D., Battle Creek, Editor of THE JOURNAL, MSMS, spoke before the Sociology Club of Western Michigan College, Kalamazoo, on January 24. His subject was "The Leaning Tower of Socialism." Dr. Haughey also spoke on December 13 to the Battle Creek Retail Druggist Association on "Socialized Medicine is the Entering Wedge to General Socialism."

* * *

The first residency in Industrial Medicine and Surgery in the United States, approved by the American Medical Association, recently was inaugurated in the Saginaw (Michigan) General Hospital.

* * *

The Upper Peninsula Medical Society members and their wives will convene at Houghton, in the heart of the Copper Country's beautiful vacation land, on June 23 and 24. Committees have been appointed by Dr. Alfred

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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LaBine, president of the U.P. group, and plans are well under way to make this Fifty-Second Session an outstanding success, both from the scientific and social standpoint.

The Copper Country offers some of the country's most beautiful scenery, and a wide variety of vacation activities. Doctors of the Lower Peninsula are urged to mark the dates, and are cordially invited to attend the meeting and enjoy a vacation. Information may be secured by writing to the secretary, Dr. A. B. Aldrich, Hancock.

* * *

Medical Michigan Authors

Hermann Pinkus, M.D., of Monroe, Michigan, published a paper, "Preliminary and Short Reports, Mitotic Division of Human Dendritic Melanoblasts" in *Journal of Investigative Dermatology,* December, 1949.

Don Marshall, M.D., of Kalamazoo, Michigan, published a paper, "Lacerations of the Eye" in *JAMA,* January 28, 1950.

Aaron A. Farbman, M.D., of Detroit, Michigan, published a paper, "Retroperitoneal Fatty Tumors: Report of a Case and Collective Review of the Literature from 1937 to 1947," in *Archives of Surgery,* February, 1950.

Ralph Lee Fisher, A.B., M.D., F.A.C.P., and **Morris Zukerman, A.B., M.D.,** Detroit, Michigan, published a paper, "Massive Dosage of Penicillin Administered by Continuous Intramuscular Infusion", in *Internal Medicine,* June, 1948.

Ralph Lee Fisher, M.D.; Morris Zukerman, M.D., and **Donald N. Sweeny, Jr., M.D.,** Detroit, Michigan, published a paper, "Tetraethylammonium Chloride in Treatment of Herpes Zoster and Intercostal Neuralgia," in *Archives of Neurology and Psychiatry,* February, 1949.

* * *

Examination for Medical Officers.—The United States Health Service will hold examinations for medical officers in the regular corps on May 15, 16, 17, 1950 at a number of points throughout the United States.

Applications must be received not later than April 17. Requirements: United States citizen, at least 21 years of age, graduated from a recognized school of medicine.

Assistant Surgeon—At least seven years of educational training and professional experience subsequent to high school.

Senior Assistant Surgeon—At least ten years of educational training and professional experience subsequent to high school.

* * *

Michigan Essayists: The American College of Surgeons' sectional meeting, February 20 and 21, 1950, Louisville, Kentucky, featured several Michigan essayists: "Injuries to the Elbow Region," George J. Curry, M.D., Essayist, Flint, Michigan; "Intestinal Obstruction, Panel Discussion," Clifford D. Benson, M.D., Detroit, Michigan; "Immediate Care of the Injured," George J. Curry, M.D., Flint, Michigan; "Gastric and Intestinal Intubation," Charles G. Johnston, M.D., Detroit, Michigan.

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Basic Principles in General Surgery, two weeks, starting April 3.
Personal Course in General Surgery, two weeks, starting April 17.
Surgery of Colon and Rectum, one week, starting April 10, May 15.
Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week, starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting April 24.
Fractures and Traumatic Surgery, two weeks, starting March 20, June 12.
GYNECOLOGY—Intensive Course, two weeks, starting March 20, April 17.
Vaginal Approach to Pelvic Surgery, one week, starting April 3.
OBSTETRICS—Intensive Course, two weeks, starting April 3, June 5.
PEDIATRICS—Intensive Course, two weeks, starting April 3.
Personal Course in Cerebral Palsy, two weeks, starting July 31.
Personal Course in Diagnosis and Treatment of Congenital Malformations of the Heart, two weeks, starting June 5.
MEDICINE—Intensive General Course, two weeks, starting April 24.
Electrocardiography and Heart Disease, two weeks, starting July 17.
Hematology, one week, starting May 8.
Gastro-Enterology, two weeks, starting May 15.
Liver and Biliary Diseases, one week, starting June 5.
Gastroscopy, two weeks, starting May 15, June 12.
DERMATOLOGY—Formal Course, two weeks, starting May 8. Informal Clinical Course every two weeks.
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Research Grant: The Research Division of Harper Hospital Detroit, Michigan, has announced the grant of $10,000 from the U. S. Public Health Service, National Institute of Health, Division of Medical Research Grants to Louis A. Schwartz, M.D., for a research study to be made on the "Psychosomatic Aspects of Peptic Ulcer." Research assistant and psychiatric social worker is Miss Josephine Groves, a graduate of the Smith College School of Social Work. The research will consist of determining the specific psychodynamic factors precipitating peptic ulcer in types of personality structure, and will include continuous motility studies, determination of total acidity and volume flow of gastric secretion, checked and controlled by pharmacological methods to show the relationship of emotional excitation and gastric physiology. Psychological tests of the projective type, encephalographic tracings and peripheral vascular changes will be correlated with observations as to underlying emotional factors. Intensive individual psychotherapy will be extended to some patients while others will be treated by group psychotherapy. It is planned to repeat these observations following vagotomy in some cases to evaluate the pathways for emotional excitation.

* * *

Experimental Status of Hormone Drugs Makes General Use Undesirable, Says A.M.A.

Widespread use of ACTH and cortisone in the routine practice of medicine would be extremely undesirable at present, according to the American Medical Association's Council on Pharmacy and Chemistry.

A report of the council appearing in the February 4 JAMA says in part:

"In the present state of our knowledge it would be extremely undesirable to permit widespread use of these potent preparations in the routine practice of medicine, and it is perhaps fortunate that neither drug is now available in unlimited quantities.

"Because of the limited amounts of both drugs presently available, their use must be restricted to those instances where they will aid in understanding the mechanism of a disorder."

The report points out that while prompt and dramatic relief has been provided in arthritis, gout and other diseases, the improvement usually is maintained only as long as the administration of the drug is continued.

* * *

National Legislation—S. Res. 204: On January 6, 1950, Senator Langer of North Dakota introduced a resolution in the Senate to create a three-man subcommittee of the Senate Judiciary Committee for the purpose of making a full and complete investigation "to determine the causes of the high prices of eyeglasses and to ascertain whether manufacturers are sharing profits with oculists and optometrists."

* * *

Alfred H. Whittaker, M.D., of Detroit is another Michigan doctor who this year is president of a national medical organization, and is presiding at an annual meeting. The American Association of Industrial Physicians and Surgeons annual conference will be held in the Hotel Sherman, Chicago, April 22-29, 1950.

The Upper Peninsula Medical Society meeting will be held at the Michigan College of Mines and Technology, Houghton, Michigan, on Friday and Saturday, June 23-24, 1950. Program will be published in the April Number of JMSMS. Alfred LaBine, M.D., Houghton, is President; N. J. McCann, M.D., of Ishpeming, is President-Elect; and Addison Aldrich, M.D., of Houghton, is Secretary.

* * *

Tuberculosis Deaths. In 1933 nineteen States and the District of Columbia had death rates of sixty or more per 100,000. By 1940 this number had been reduced to seven and by 1948 to only one. In 1933 only ten of the States had death rates under forty, whereas in 1948 only six States had rates over forty.

* * *

Representative Reva Beck Bosone, D., Utah, on January 16 introduced HR 6766, a compulsory health insurance bill, substantially the same as the administration plan, except that the beneficiary would bear the first $50.00 in medical care expenses each year for himself and dependents, and $25.00 for dentist bills. After that the plan would assume further obligations.

It has been referred to the Interstate and Foreign Commerce Committee. The scheme provides for fifteen member "Health Boards" in each of the states appointed by (The Medical Society having the largest membership in the state). This board will have six physicians, three dentists, two nurses, two hospital supervisors, and two pharmacists, all serving four-year terms. Their main job would be to set fee schedules in conformity with regulations of the Federal Security Agency. It provides a 3 per cent payroll tax, and an additional 1 per cent taken from the general funds in the Treasury to meet deficits. It covers the same group covered by the Social Security laws as amended.

Representative Kenneth B. Keating, R., New York, introduced HR 6727, a bill aimed at bolstering membership in pre-payment plans by allowing subscribers to deduct premiums paid from their income taxes. He discovered that he had inadvertently made his bill subservient to the Flanders-Ives-Herter bill of the Senate, so on January 17, Tuesday, introduced a new bill HR 6819, providing more liberal definitions of pre-payment groups whose members or clients may claim deductions from income tax.

The new bill provides that premiums be deductible from taxes whether they were paid to co-operatives, medical, or hospital groups, giving services on a pre-payment basis for organizations of the Blue Cross, Blue Shield type, whether publicly or privately operated, whether commercial or non-profit.

* * *

FBI Still Active. Five agents of the Chicago office of the Federal Bureau of Investigation are still at work at AMA Headquarters checking the records of various

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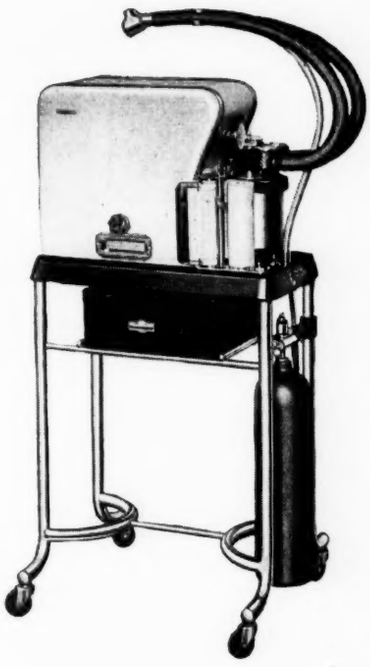

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Basal Metabolism	Poisons
Serology	Court Testimony

Bureaus and Councils. They are using the Board of Trustees room, and so far have checked the records of the Secretary's office, the Judicial Council, the Board of Trustees, the Council on Medical Service, the Co-operative Medical Advertising Bureau and the Council on Medical Education and Hospitals. They are now checking the records of the Bureau of Economic Research.

In October, Attorney General Howard McGrath announced that the Justice Department wants to know if any monopoly existed in connection with pre-payment medical plans. McGrath was formerly Chairman of the Democratic National Committee.

* * *

Raymond Hussey, M.D., former Dean of the School of Occupational Health, Wayne University, Detroit, has joined the staff of the Council of Industrial Health, AMA, as Scientific Director. He relinquished his membership on the Council in order to take this position. He had been a member since 1941 and Vice Chairman for several years.

* * *

Staff Members at Cottage Hospital of Grosse Pointe, Michigan, are giving a series of weekly lectures to the Nursing Staff of the hospital. Subjects for discussion are concerned with new drugs and the medical and nursing care in some of the specialties.

* * *

Medical Students: The Council on Medical Education and Hospitals of the American Medical Association has just made a study to determine the comparative enrolments in approved medical schools during the forty years since 1910, when the Council published its first list of approved medical schools.

This study reveals that in 1910 there were sixty-six Class A medical schools with a total enrolment of 12,530 students; in 1920 there were seventy Class A medical schools with a total enrolment of 12,559 students; in 1930 there were seventy-six approved medical schools with a total enrolment of 21,597; in 1940 there were seventy-seven approved medical schools with a total enrolment of 21,271; in 1950 there are seventy-nine approved medical schools with an estimated total enrolment of 24,800 students.

These data clearly show that the opportunities to study medicine in approved medical schools have practically doubled in the last forty years and have more than kept pace with the growth in population.

The number of physicians per 100,000 population in the United States declined from 149 in 1909 to 125 in 1929. Since 1929 the ratio has steadily risen to 137 in 1949. These new data showing the increasing number of students enrolled in approved medical schools reveal clearly that the decline in the physician-population ratio from 1909 to 1929 was due entirely to the closing of substandard medical schools. A physician-population ratio that included only physicians who were graduated from approved medical schools would reveal a steadily rising trend in the past four decades.

Even the poorest of the approved medical schools today have better staffs and facilities than most of the approved medical schools of thirty or forty years ago, and the leadership of the medical profession and the medical

Say you saw it in the Journal of the Michigan State Medical Society

colleges has resulted in the training of a greatly increased number of well qualified physicians to serve the American people.

This accomplishment is important in the increasing life expectancy. In the last forty years life expectancy at birth in the United States has increased more than seventeen years. This accomplishment also is important in the reduction of maternal mortality, which in the last twenty years has been reduced by more than 85 per cent, and has influenced considerably the over-all crude death rate for the nation, which has shown a gradual decrease despite the aging of the population.

The general health of the population of the United States is constantly improving. No one can deny this without resorting to falsification. Those who claim that a health crisis exists in this country cannot prove it, and yet by inference, and often more directly, they plead a crisis to bolster their arguments for enlargement of medical schools and increase in enrolments of students.

The latest report from the Council on Medical Education offers a convincing reply to those who doubt the effectiveness of the present orderly progression in medical education to meet the health needs of the nation. To heed the pleas of those who would discard order for chaos would cause a farrago that would return the level of medical education and care to that of several decades ago.—Editorial, *JAMA*, Feb. 10, 1950.

* * *

HIGHLAND PARK POSTGRADUATE CONFERENCE

(Homecoming Day for Interns and Residents)

Wednesday, April 19, 1950
Highland Park General Hospital, Highland Park, Michigan

All doctors of medicine are cordially invited to attend. No registration fee.

Program

"The Adaptation Syndrome" (sometimes called the Alarm Reaction)
HANS SELYE, M.D., Ph.D., D.Sc., F.R.S. (C)
Professor and Director of the Institute of Experimental Medicine and Surgery, University of Montreal, Montreal, Quebec, Canada.

"The Relation of Anesthesia to Obstetrics"
LOUIS M. HELLMAN, M.D.
Associate Professor of Obstetrics, Johns Hopkins Medical School; obstetrician and co-director of anesthesia and analgesia program, Johns Hopkins Hospital

"The Effects of Massive Radiation Exposure and Possible Therapeutics"
(In other words in case of atomic warfare in Michigan, what does it do, how should you protect yourself, and what might you use for treatment)
HYMAN L. FRIEDELL, M.D.
Director of the Department of Radiology, University Hospitals of Cleveland

"The Mechanism Involved in Congestive Heart Failure as a Guide in Its Management"
THOMAS J. DRY, M.D.
Cardiologist, Mayo Clinic, Rochester, Minn.

Surgical Speaker to be announced possibly on the subject of "The Indications for Cardiac Surgery"

Luncheon at noon courtesy of the Highland Park General Hospital Management Conference sponsored by the Highland Park Physicians Club

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The eightieth birthday of one of Jackson's most beloved physicians was appropriately celebrated as all the members of the Jackson County Medical Society gathered on Thursday, February 2, to honor C. D. Munro, M.D., a veteran of more than fifty years of medical practice.

The program honoring Doctor Munro began in the afternoon with speeches by prominent physicians from throughout the country including J. C. Meigs, M.D., Boston, Mass., Walter C. Alvarez, M.D., Rochester, Minn., and Frederick A. Coller, M.D., Ann Arbor.

The principal speaker at the evening banquet was George M. Curtis, M.D., Chairman and Professor of Surgical Research at Ohio State University Medical School. Dr. Curtis, a native of Jackson County, noted that the poise and dignity of a young doctor (Dr. Munro) back in 1903 had helped him in his decision to become a member of the medical profession.

Dr. Munro was presented with a gold watch, chain and knife by Mr. Carl Saunders, Editor of the *Jackson Citizen-Patriot* and a lifetime friend of the medical profession. The watch was suitably inscribed "To Dr. Colin D. Munro on his 80th birthday from the Jackson County Medical Society."

Testimonial wires and letters from friends all over the United States were read and presented to Dr. Munro and to Mrs. Munro, who attended with her husband.

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GENESEE COUNTY MEDICAL SOCIETY
Fifth Annual Cancer Day
Wednesday, April 12, 1950
Merliss Brown Auditorium
Hurley Hospital, Flint, Michigan
9:40 A.M.

"Cancer of the Kidney and Bladder"
REED M. NESBIT, M.D., Professor of Surgery and Chief of Urological Service, University of Michigan Medical School, Ann Arbor

"Hopeful Aspects of Malignant Lymphomas"
LLOYD F. CRAVER, M.D., Attending Physician, Memorial Hospital, Associate Professor of Clinical Medicine, Cornell University Medical College, New York City

"The Management of Cancer of the Mammary Gland"
CUSHMAN D. HAAGENSEN, M.D., Clinical Professor of Surgery, Director of the Institute of Cancer Research, College of Physicians and Surgeons, Columbia University, New York City

"Cancer of the Regional Lymph Nodes"
GRANTLEY W. TAYLOR, M.D., Associate in Surgery, Harvard University Medical School, Visiting Surgeon, Massachusetts General Hospital, Boston, Mass., Chairman of the Cancer Committee American College of Surgeons

"Early Signs and Symptoms of Intercranial Tumors"
PAUL C. BUCY, M.D., Professor of Neurology and Neurological Surgery, University of Illinois College of Medicine, Chicago, Attending Neurological Surgeon, Illinois Neuropsychiatric Institute, Chicago

Luncheon
Hurley Hospital Cafeteria
5 to 7:00 P.M.
Social Hours
7:00 P.M.
Subscription Dinner

Please make dinner reservations by mail—Cancer Education Committee, Genesee County Medical Society, 900 Begole Street, Flint, Michigan.

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

ATTAINING MANHOOD. A Doctor Talks to Boys About Sex.

ATTAINING WOMANHOOD. A Doctor Talks to Girls About Sex. By George W. Corner, M.D., Professor of Anatomy, University of Rochester Medical School. New York: Harper & Brothers, 1950. Price $1.25 each.

These two books are separately issued by the same author. They are clearly and simply written, giving brief, but exact expression of the facts presented. They are sufficiently illustrated, and make a good guide to early instruction on sex principles.

MARIHUANA IN LATIN AMERICA, THE THREAT IT CONSTITUTES. By Pablo Osvaldo Wolff, M.D., Ph.D., M.A., Member of Expert Committee on Habit Forming Drugs of the World Health Organization; Sponsored by the Washington Institute of Medicine. Washington, D. C.: The Linacre Press, 1949. Price $1.50.

This book is translated from the Spanish, and is a very complete study of the Marihuana question, telling of the growth of the weeds. The situation in Mexico, Cuba, Argentine and other South American countries is especially given attention. It is a challenging study.

THE EYE AND ITS DISEASES—by 92 International Authorities: Edited by Conrad Berens, M.D., F.A.C.S. New, 2nd Edition. 1,092 pages with 436 figures, 8 in colors. Philadelphia and London: W. B. Saunders Company, 1949. Price $16.00.

The thirteen years since the first edition of this book have been fruitful ones in ophthalmology, and an effort to grasp and present the new material and treatment has been rather well done. There are ninety-two contributors, two from Michigan, Professors Fralick and Ruedemann. Dr. Fralick has the chapter on diseases of the sclera and Dr. Ruedemann the enucleation of the eyeball. The chapter formerly written by Harry S. Gradle and rewritten by Duke Elder is probably one of the best in the book, and one needing the most study. In that chapter we are unable to find mention of a condition which we are finding, and which cannot be diagnosed as simple or compensated glaucoma yet, but must be called "potential" or pre-glaucoma. The chapter on tonometry rather hints at this fact. It mentions that 40 per cent of eyes which are consistently found with a pressure of 27 to 31 mm. of mercury will within two years become glaucomatous. Other chapters of the book are just as interesting and valuable, most being devoted to diagnosis and the scientific study of the disease. Separate chapters treat of eye surgery and treatment. A most valuable book for the teacher and the advanced student.

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